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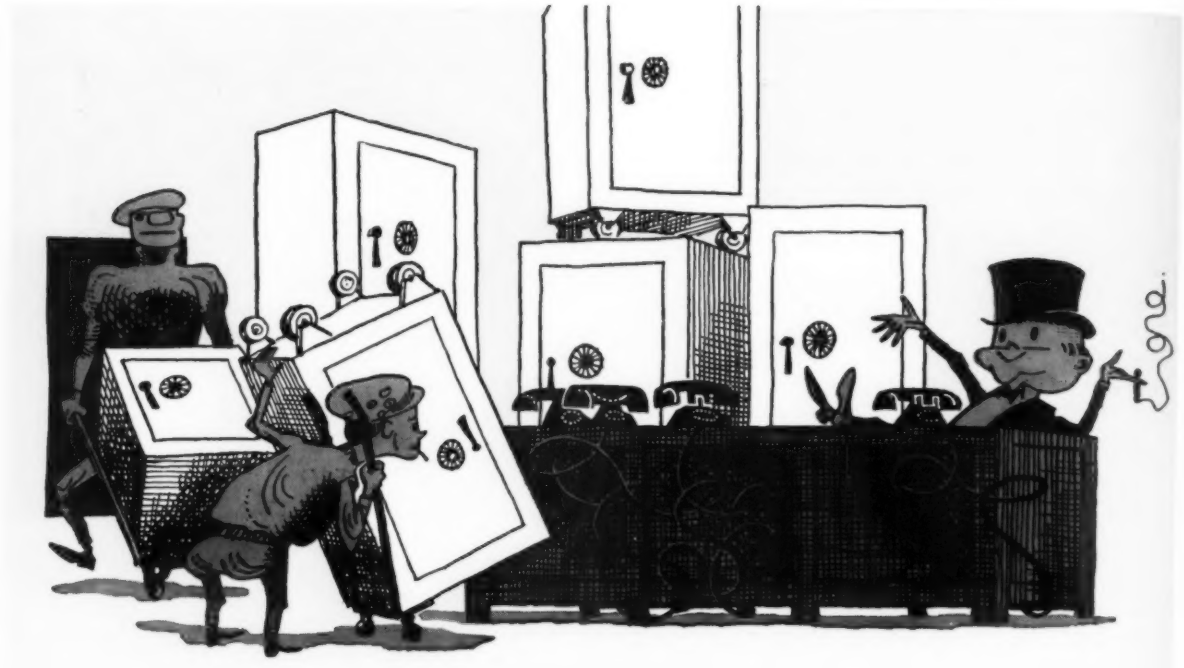
Drug and Cosmetic Industry

JUNE 1954



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June 1954 Vol. 74 No. 6

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MILTON A. LESSER, *Technical Editor*
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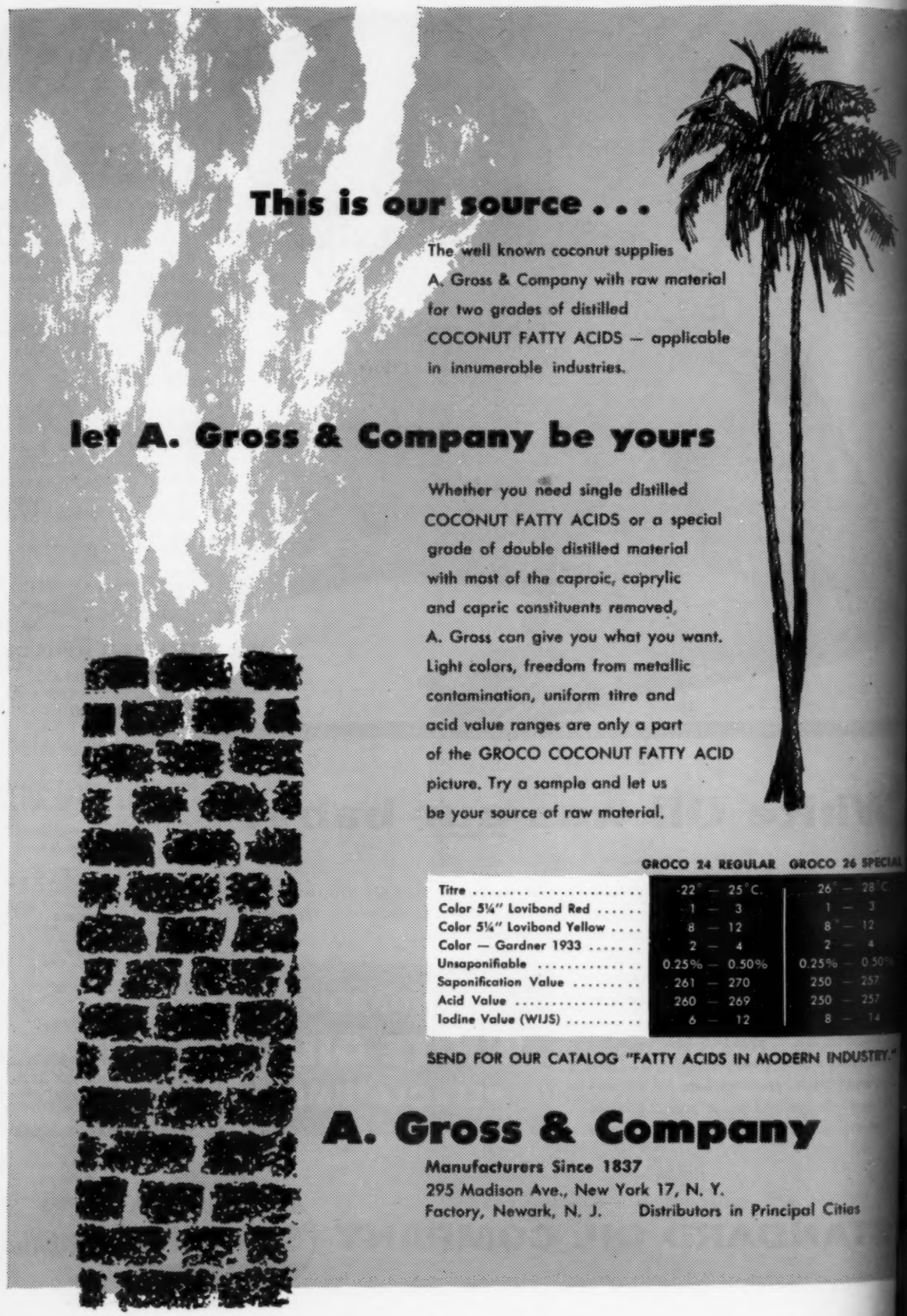
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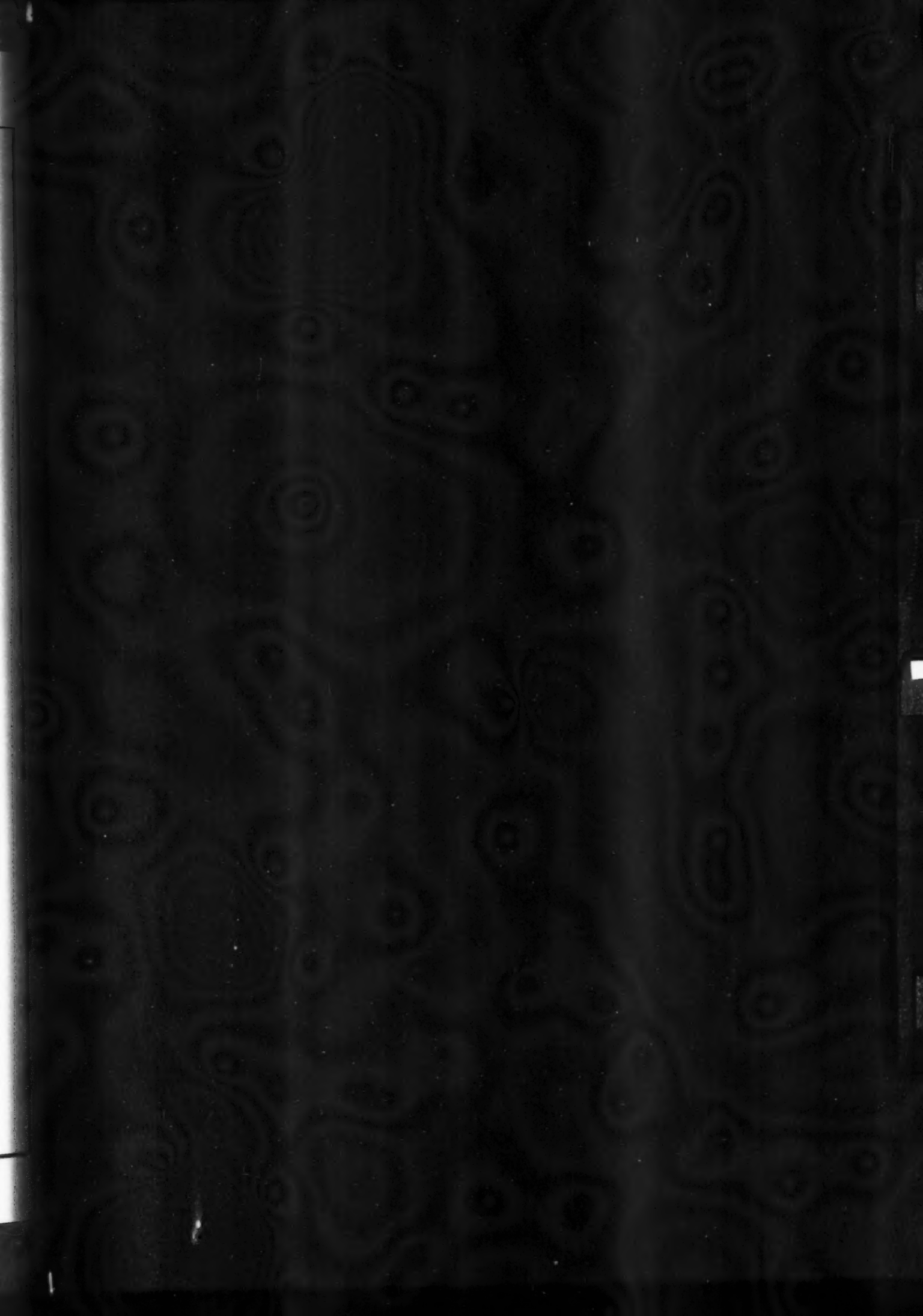

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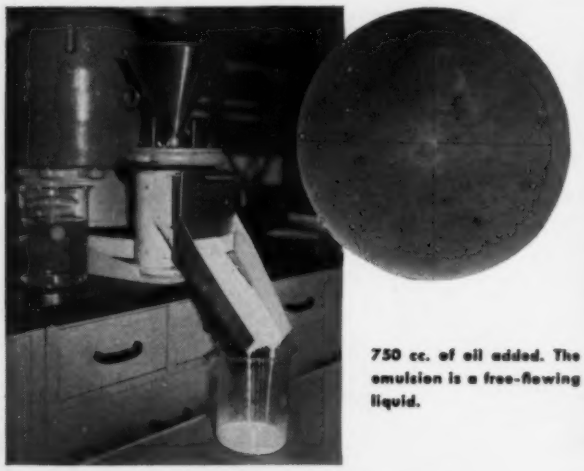
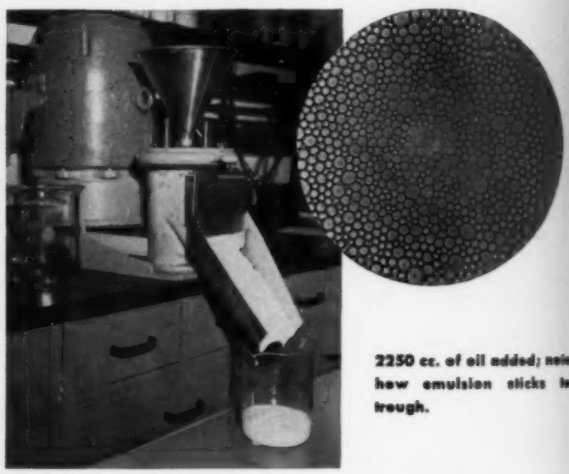
Effect of adding oil to O/W emulsion

An oil-in-water emulsion becomes more viscous as increasing amounts of oil are added to the mixture. The individual particles of the internal or dispersed phase become more tightly crowded as their number increases. Thus, an emulsion can be made to almost any consistency, from thin to heavy-bodied.

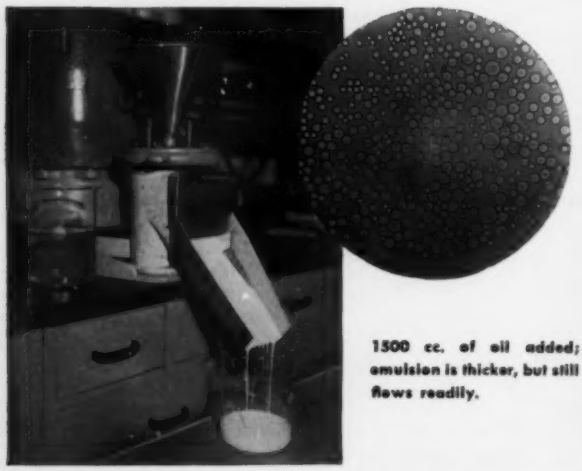
To demonstrate this effect, a series of photographs taken in the Atlas Laboratories are shown here. These illustrate the change in viscosity when 3000 cc. of oil are added to 300 cc. of water-emulsifier mixture, in successive steps of 25%, 50%, 75% and 100% of the oil. The corresponding photomicrographs reveal the increased mechanical crowding of oil particles, which causes the structural change in consistency.



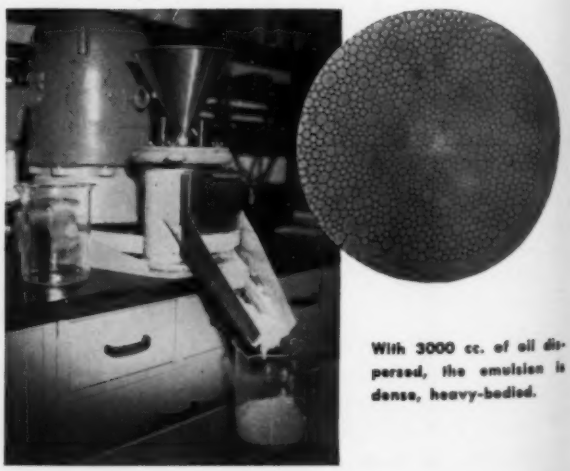
750 cc. of oil added. The emulsion is a free-flowing liquid.



2250 cc. of oil added; note how emulsion sticks to trough.



1500 cc. of oil added; emulsion is thicker, but still flows readily.



With 3000 cc. of oil dispersed, the emulsion is dense, heavy-bodied.

A parallel effect is obtained in water-in-oil emulsions; that is, as water is added to an oil-emulsifier mixture, the resulting emulsion increases in viscosity.

To assist in the formulation of your emulsions, Atlas offers a varied line of surface active agents, and technical assistance in applying them in your specific product.

HOW TO TEST SORBITOL FOR COSMETIC USE

A "wrist test" tells you very little about sorbitol's properties as a cosmetic ingredient. In fact, it is misleading. Sorbitol solutions by themselves are thick syrups that feel slightly sticky to the skin . . . but behave differently when used in a finished formula.

The only conclusive way to test sorbitol is to try it in your product. Far from making a cream feel sticky, sorbitol produces a smooth, dry feel. Test its humectant properties, by exposing sample creams to various humidities and observing the weight loss. You will find, as we have found in our own laboratory investigations, that creams conditioned with sorbitol lose moisture much more slowly than those made with other humectants.

We'll be glad to send you samples of sorbitol for your own research. And to assist you in formulation, we have prepared an 86-page booklet entitled "A Guide To Cosmetic and Pharmaceutical Formulation with Atlas Products." This booklet includes 96 different cosmetic and pharmaceutical formulas which have been thoroughly tested in the Atlas Laboratories. We'll be glad to send a copy to executives and research men who write to us on their company letterhead.

The function of sorbitol in cosmetic creams

Stabilization of moisture content is generally considered the principal reason for incorporating a humectant in a cosmetic cream. In this respect, sorbitol is particularly effective. Its low equilibrium moisture content, and its slow rate of moisture gain or loss, retard dryness and the formation of crust when the cream is left exposed to the air.

Another major use of sorbitol is to provide smooth application of the cream. Sorbitol, by its humectant nature, releases water more gradually from the emulsion as the cream is applied, providing a spreading or lubricating action that prevents "roll."

The humectant also helps to impart a good cosmetic feel on the skin. Materials that are too hygroscopic produce a damp or sweaty feel. Sorbitol, because of its low equilibrium moisture content, gives a desirable smooth, dry effect. In foundation creams, the heavy body and high viscosity of sorbitol are advantageous in making a cream that will provide good adhesion for subsequently applied powder.

The moisture stabilizing properties of sorbitol are of particular benefit in oil-in-water emulsions, especially in soap emulsified creams. The superior cosmetic qualities produced by sorbitol, however, are equally advantageous in both W/O and O/W creams. For further information, write for a copy of the article, "Hygroscopic Agents in Cosmetics."

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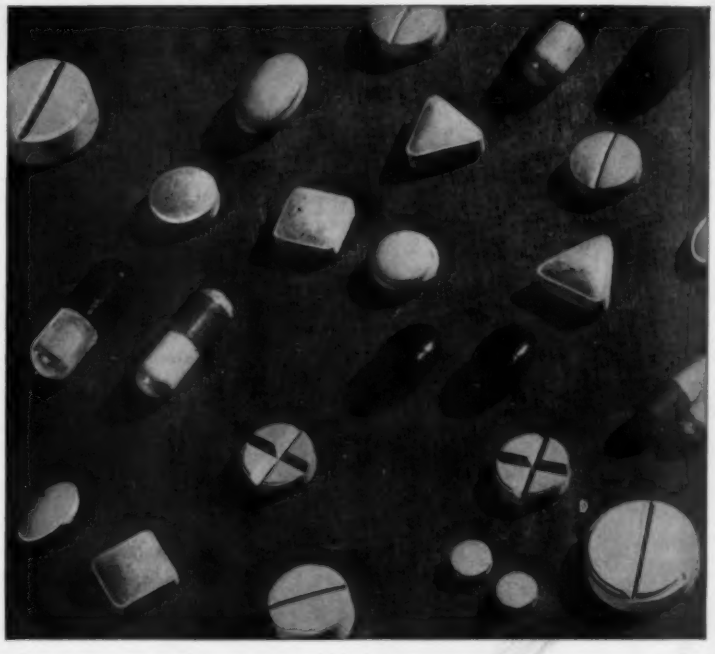

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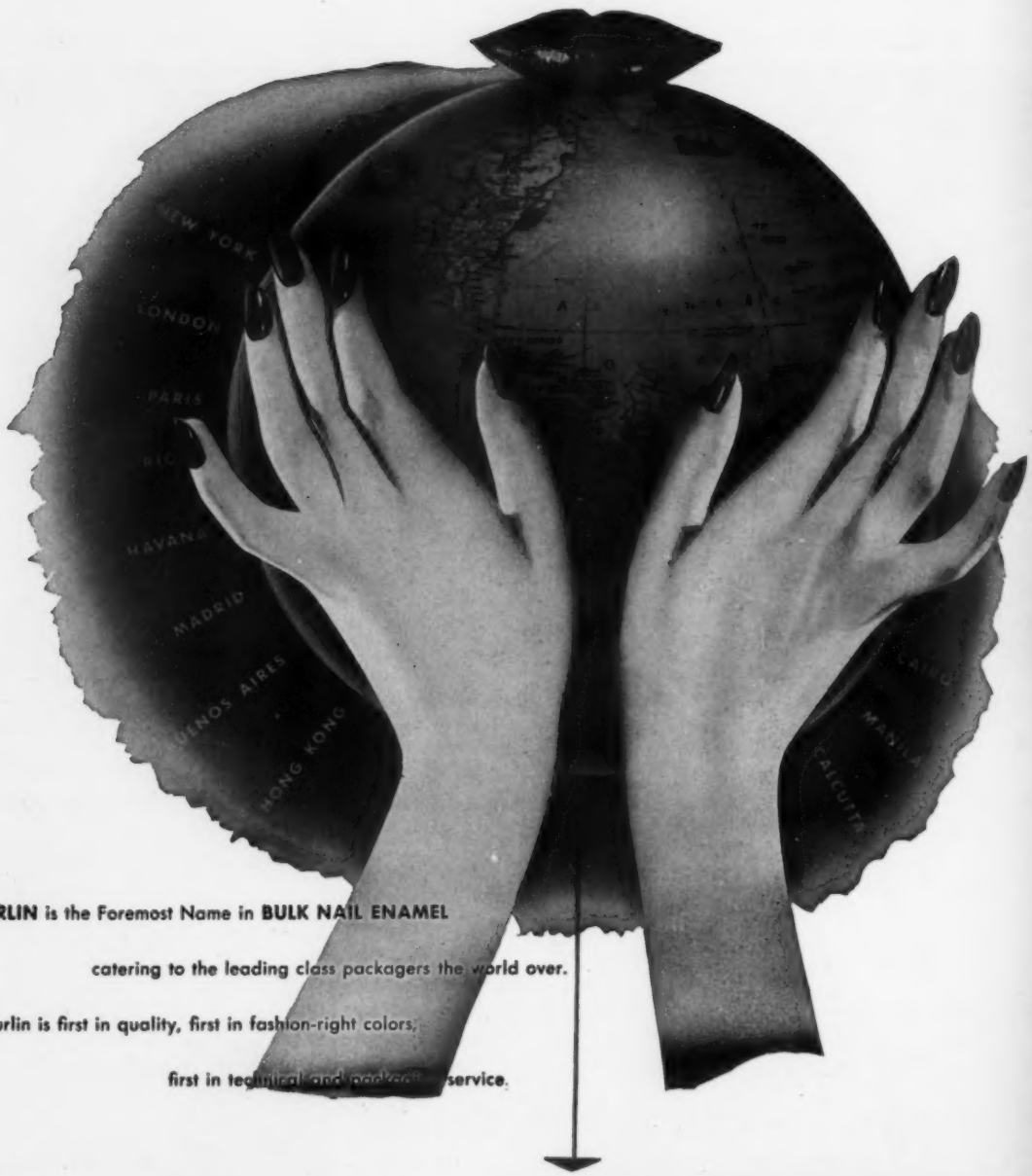

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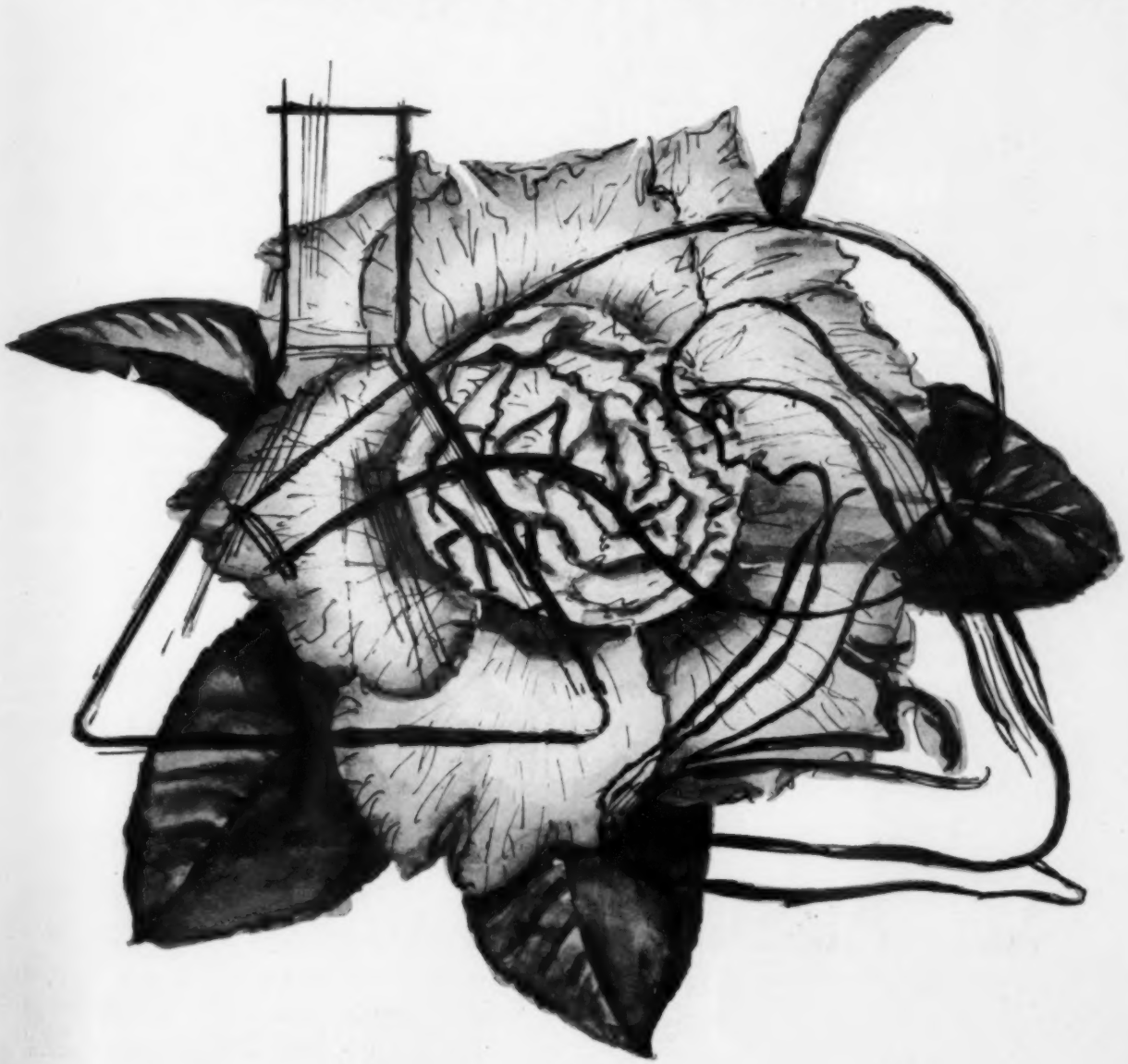

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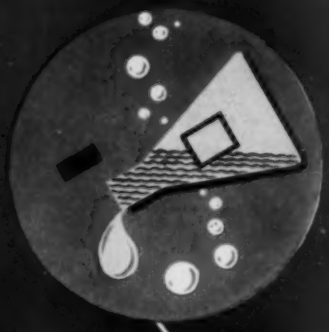

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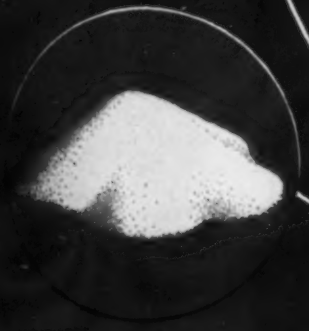

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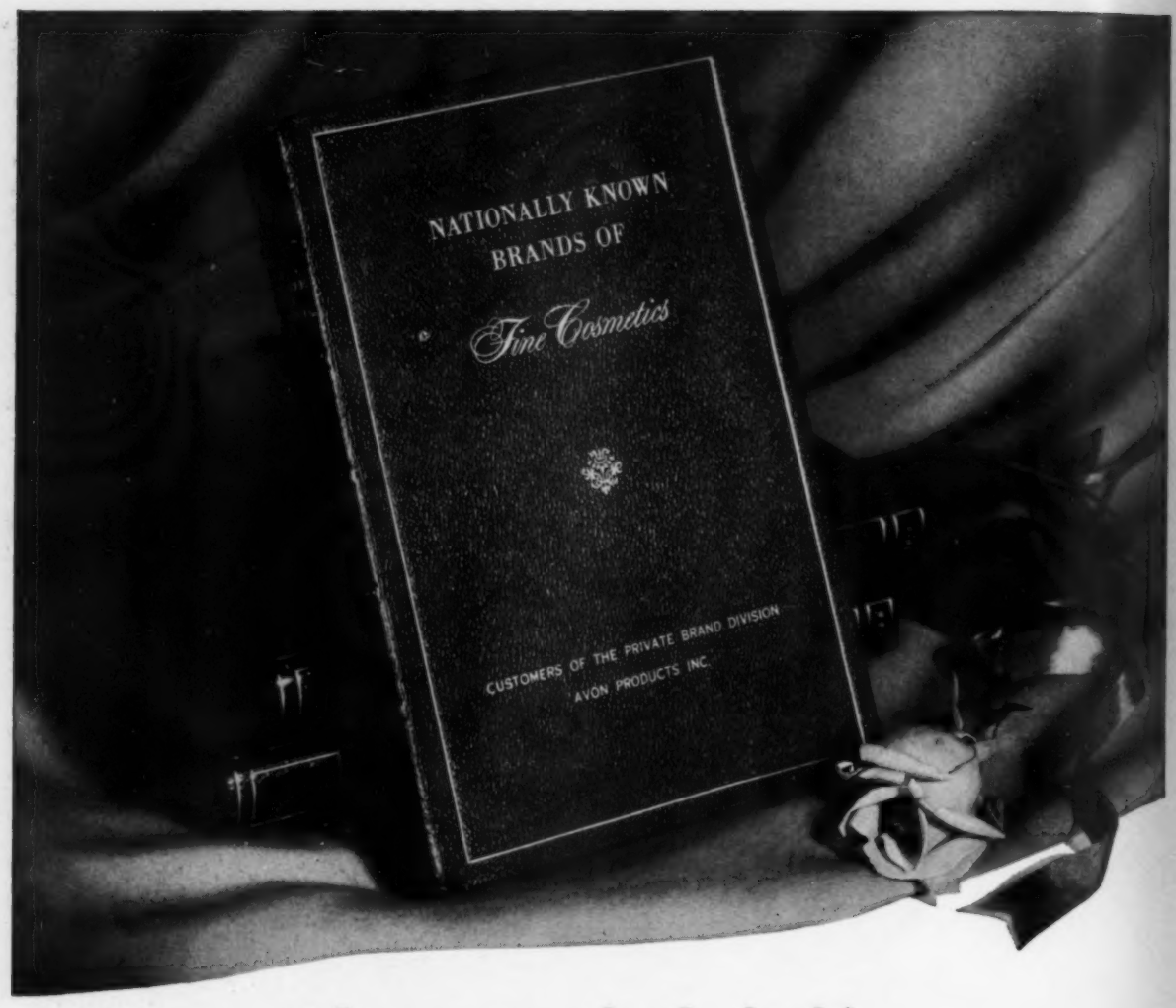

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Naturally, this book is a "closed" one. Names of the brands of fine cosmetics and toiletries made by the Private Brand Division of Avon Products are held in strict confidence.

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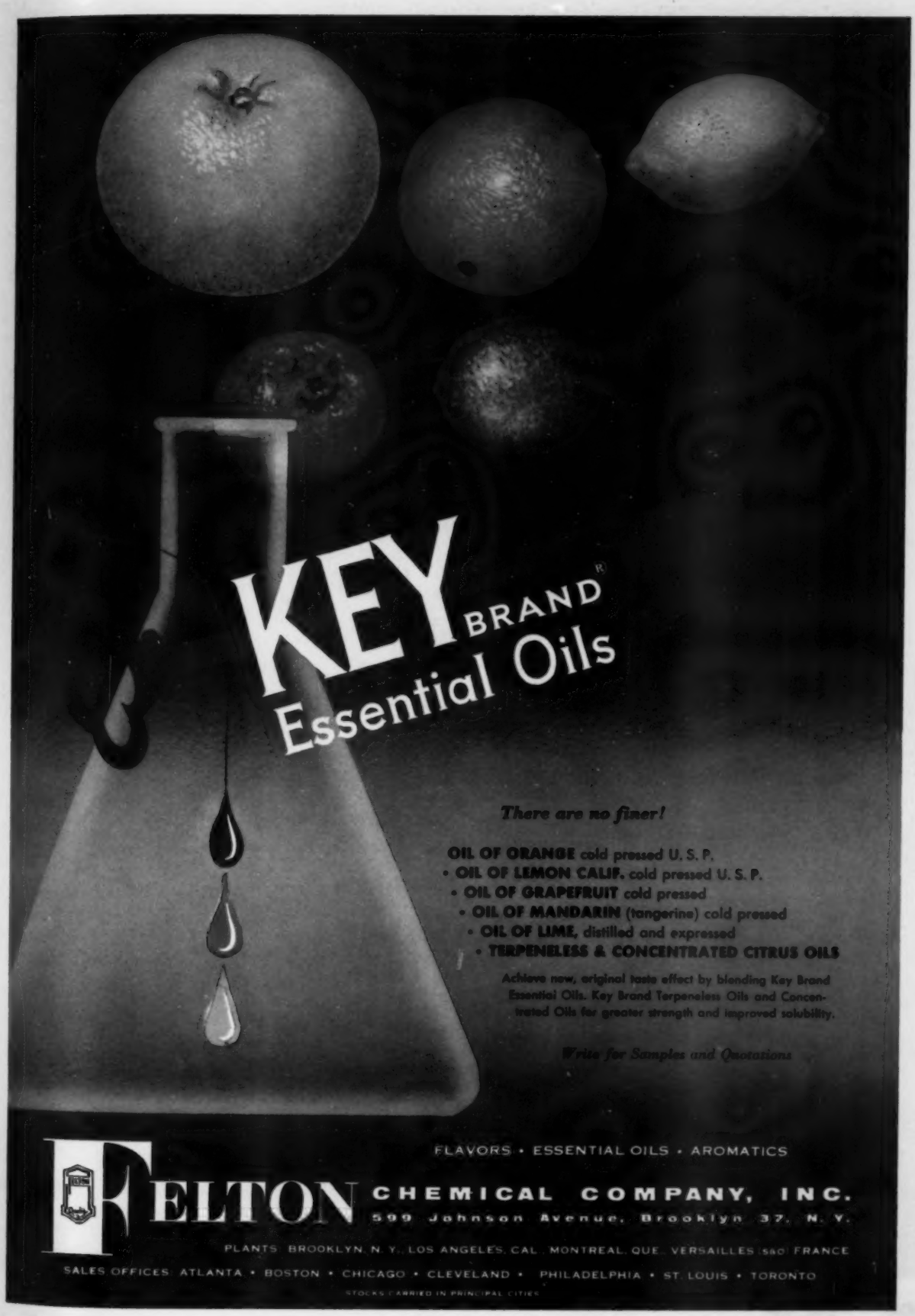
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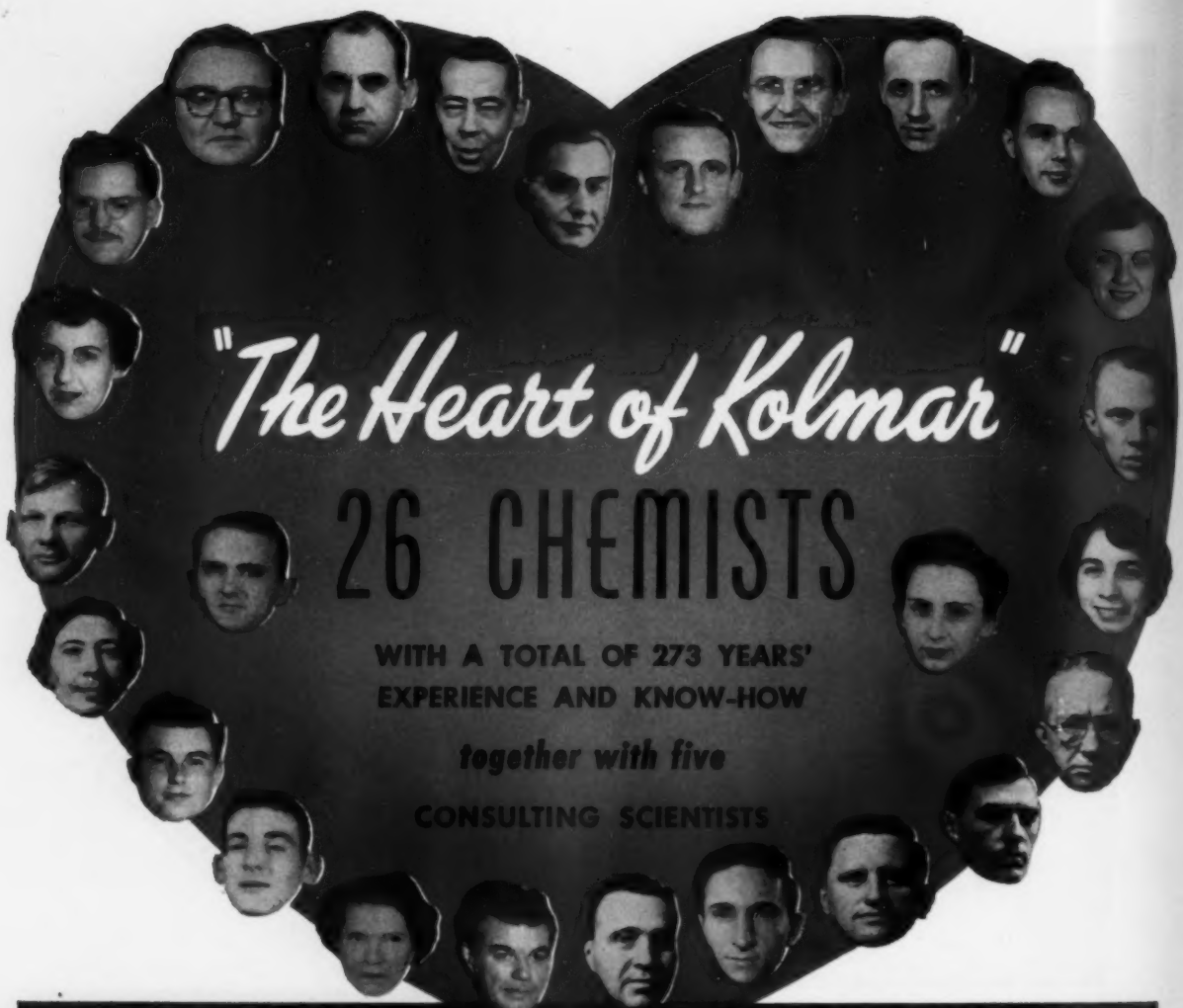
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U.S.I. CHEMICAL NEWS

June ★ A Series for Chemists and Executives of the Solvents and Chemical Consuming Industries ★ 1954

Methionine Improves Blood Clotting Time

In a recent animal study clinicians observed that injections of methionine helped protect the liver and appeared to reduce the time required for blood clotting.

The researchers produced fatty livers and prolonged blood clotting time in a control group of guinea pigs by subcutaneous injections of an amino acid antagonist, ethionine. A similar group was given methionine injections as well as ethionine.

A comparative examination of the guinea pigs receiving both ethionine and methionine showed livers to be almost normal and blood clotting times far closer to normal than those of the ethionine-treated controls. It has previously been reported (*U.S.I. Chemical News*, March 1949) that methionine helped blood clotting time in rabbits by counteracting the action of dicoumarol.

Versatile Wood Extract Is Highly Refined, Sugar-Free

Refined to a degree previously thought impossible, a desugared extract of coniferous woods is now being offered. Its major constituent is calcium lignosulfonate, and it is described as capable of reaction with a host of organic materials. The extract is used as a dispersant wetting agent for fertilizer and oil drilling muds; and as an ingredient in the formulation of adhesives for industrial glues, remoistenable tapes, resin extenders, cement additives, foam stabilizers and emulsifiers.

New Insulating Material Resists Water Damage

A solution to the problem of pipe insulation damage resulting from severe water exposure reportedly is offered by a new water resistant insulating chemical. Immersion in boiling water for more than 300 hours, with intermittent drying on hot pipes, is said to have caused only a slight roughening of the insulation surface and no loss of insulating values. It is predicted that the new insulation will be especially useful for underground pipe lines subject to flooding, process equipment and piping requiring hosing or washing down.

Battery Converts Radiation of Sun

A solar battery, said to be the first of its kind, which converts useful amounts of the sun's radiation into electricity has been successfully developed. According to the report, the battery has achieved an efficiency of 6 per cent in converting sunlight directly into electricity, which compares favorably with the efficiency of steam and gasoline engines.

Authorities say that the new development may mark the beginning of a new era, leading eventually to the harnessing of the almost limitless energy of the sun for the uses of industry and civilization.

U.S.I. Researchers Develop Five New Polyester Resins For Reinforced Plastics

Resins Created for Special Needs of Plastics Industry

Five new polyester resins for the manufacture of reinforced plastics were recently announced by U.S.I. One of the nation's pioneer producers of synthetic resins, U.S.I. has trade-named the resins AROPOL. Each grade is tailored for the major outlet of today's reinforced plastics market — the production of fiberglass-reinforced plastics.

Uses Limited Only By the Imagination . . .

Reinforced plastics are one of the newest plastics materials available to industry. They have exceptionally high strength with low weight, great impact resistance and dimensional stability, and excellent resistance to weathering, rot and chemical corrosion. Their low thermal conductivity and resistance to heat and flame are properties now being widely utilized in the manufacture of electrical insulators.

Some of the current uses of reinforced plastics, to name only a few, are as follows: in home appliances, in gears and pinion teeth, in industrial and commercial buildings, in automobile bodies, in home furnishings, in metal stamping and jigs for metal fabrication, etc. Future uses are said to be limited only by imagination, the potential is so great.

AROPOL 7100 is a rigid-type resin designed for matched-die molding. It offers outstanding mold release, exceptional flow and fast cure properties. It gives a faster press cycle, increased production and fewer rejects. A light stable variety of this resin is available, designated as Aropol 7100LS.

AROPOL 7110LS is an outstanding rigid-type resin for use in the manufacture of corrugated sheeting.

AROPOL 7110 is a rigid resin for general molding and hand lay-up operations. It is chemically resistant and suitable for the manufacture of fume ducts, chemical tanks, etc.

AROPOL 7200 is a rigid resin for use in the manufacture of flame-resistant plastics. It can be used for either matched-die molding or hand lay-up operations. Besides its exceptional flame resistance, it has a high resistance to heat distortion. A light stable grade designated as Aropol 7200LS is also available.

AROPOL 7300, a flexible type, can be blended with rigid resins to produce flexible

MORE

Artist's sketch of U.S.I. Polyester Resins exhibit booth for the National Plastics Exposition in Cleveland, June 7-10. U.S.I. representatives will be on hand to discuss the new polyester resins with plastics manufacturers.

June ★ **U.S.I. CHEMICAL NEWS** ★ 1954

CONTINUED

Five New Polyesters

plastics. Miscible with styrene monomer and all Aropol polyesters, it imparts flexibility and toughness to rigid resins, making them more resistant to shock and impact.

With the exception of Aropol 7300, all of the new resins have a styrene content of 25% and a viscosity of approximately 2700 cps at 25° C. Aropol 7300 has the same styrene content (25%), but its viscosity is approximately 300 cps at 25° C. Since the resins are essentially colorless, dyes or pigments may be added to give almost any color.

U.S.I.'s long experience as a leading manufacturer of synthetic resins guided its research staff to development of these unique polyesters. All of these resins are in commercial production at U.S.I.'s Newark resin plant, the largest and most modern resin plant in the world. Interested manufacturers may obtain technical data on any or all of the new Aropol polyesters by writing to the Editor, *U.S.I. Chemical News.*

Extraction Process Yields Pure Tantalum, Niobium

A new extraction process is said to separate high purity tantalum and niobium from ores regardless of the total metal content or the relative tantalum to niobium ratio of the ores. According to the report, large stocks of low grade ores or ores having a metal ratio below a marketable value can be used. The process is a liquid-liquid extraction and has been used to obtain tantalum and niobium products of greater than 99% purity.

Silicone Coating Cuts Bottle Breakage Losses

A new silicone treatment for bottles that substantially reduces breakage in filling and shipment has been reported. Test results indicate that the process cuts normal breakage losses by more than 80%.

New Handy Unit Changes Tap Water to Distilled

A new easy-to-use device is said to rapidly change ordinary tap water into the chemical equivalent of triple-distilled water for as little as 10 cents a gallon. The unit consists of a polyethylene squeeze bottle which contains cation- and anion-exchange resins.

Tap water poured into the bottle comes into immediate contact with the resins and is converted to distilled water in about one minute, according to the manufacturer. The cap of the bottle permits the user to discharge distilled water by squeezing, but will not allow resins to escape.

Synthetic Gum Turns Water Into Clear Gel

Water can be gelled by the addition of a small amount of a new synthetic gum. The manufacturer believes the gum will have many uses as a thickening, suspending and anticaking agent for cosmetics, paints, inks, and other process industry products.

The material is described as a white, free-flowing powder which readily dissolves in water to form low viscosity, low pH solutions. When neutralized, solutions undergo a phenomenal increase in viscosity. Tests have shown that the viscosity can be controlled by varying the amount of thickening agent added.

Ultra-Violet Units Used To Control Air Pollution

Ultra-violet air deodorization has been described as applicable to almost any kind of air pollution. The equipment reportedly is relatively inexpensive to install.

Large volumes of air and strongly concentrated vapors such as those found in the by-products and casing departments of abattoirs have been successfully deodorized. The ultra-violet units may be allowed to play directly on the source of odorous vapors or directed towards the contaminated atmosphere.

TECHNICAL DEVELOPMENTS

Information about manufacturers of these items may be obtained by writing U.S.I.

Labels for the laboratory, said to be impervious to oils, greases and water, and resistant to soap, acids and alkalies, have been developed. The manufacturer claims they will withstand high and low temperatures without damage. **(No. 1050)**

Rugs stop skidding when a liquid rubber plastic is brushed on to form a nonskid underlay, according to a recent report. The product also prevents fraying and may be used for repair without sewing. **(No. 1051)**

A small self-powered radio that fits in the palm of the hand has been announced. It is described as ¾ of an inch deep, 3 inches high and 3½ inches wide. **(No. 1052)**

Plastic coated industrial gloves are available which reportedly resist wear from abrasion and permit amazing hand dexterity. They are claimed to have high resistance to destructive oils and chemicals. **(No. 1053)**

A stirrer that works under vacuum without mercury seals has been marketed. According to the manufacturer it operates at speeds up to 20,000 RPM and vacuums down to 2 mm without the use of mercury seals. **(No. 1054)**

Nickel, cobalt, tungsten, chromium, etc., reportedly can be reclaimed from steel by a new, efficient, economical unit. The company states the separator was designed to afford a practical means of separating metals having a magnetic content of 20% or more. **(No. 1055)**

A caulking compound is said to look and feel like white tile but can be squeezed from a tube to fill in cracks around sinks and tube. **(No. 1056)**

A pipette filler has been invented which is said to permit the precision filling of pipettes by hand. It is designed to eliminate the danger of burns and poisoning in mouth pipetting. **(No. 1057)**

A new cleaner for pets is reported to take care of the five important jobs of cleansing, deodorizing, deitching, defleaing and bacteria-curbing for dogs or cats. **(No. 1058)**

A radioactive materials vault simplifies the transportation and storage of radioactive materials and at the same time is said to provide a relatively indestructible container for safekeeping microfilm or valuable records. **(No. 1059)**

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Amyl Alcohol (Isoamyl Alcohol)
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Araplaz*—alkyds and allied materials
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CPR Concentrates: Liquid & Dust
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Vacatone* 40

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Ethylene
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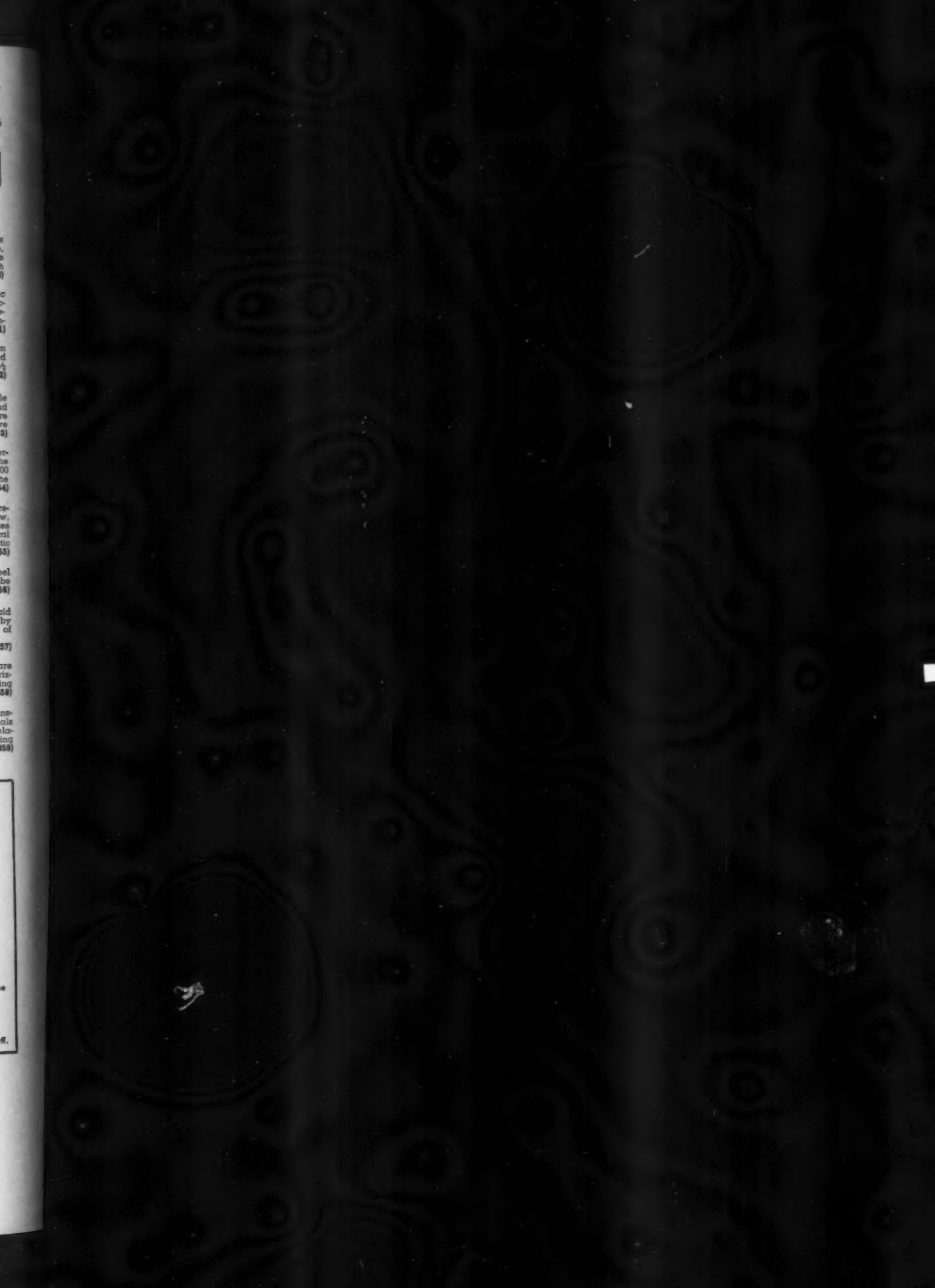

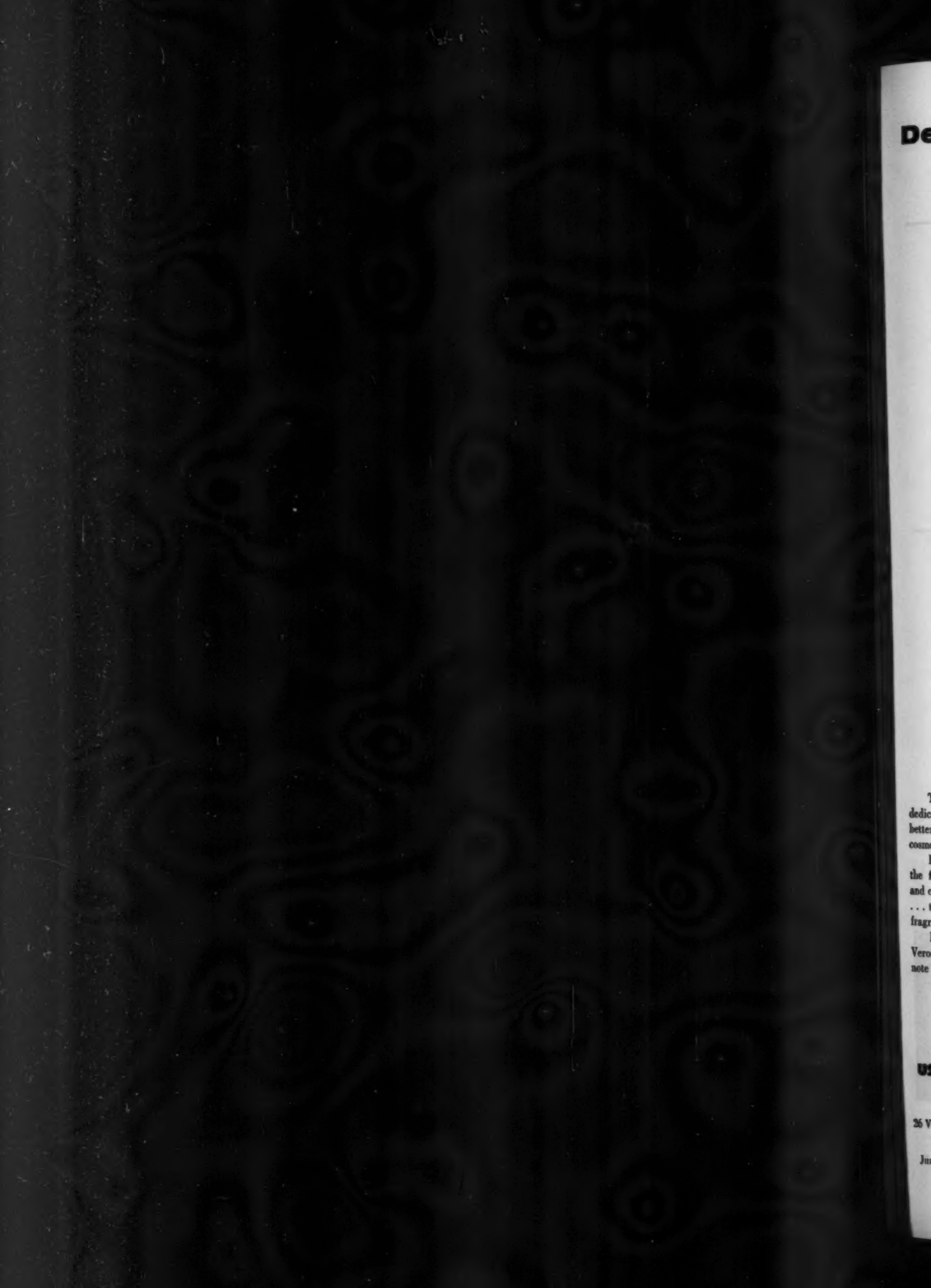

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Listed here are a few of the many outstanding Verona fragrances. Try them *in your present oils* and note the marked improvement.

ALDINE VERONA . . . With only ½ to ¾% you'll hit an exciting new aldehydic topnote.

RESEDALIA . . . . . To make your Lily and Lilac scents come thrillingly alive—add ½ to ¾%.

CYCLAMAL . . . . . Add up to 5%—for a cleaner, crisper impact.

CUMIN KETONE . . . . See how only ¼ to ½% added to your present floral fragrance heightens and freshens the effect.

Sole Representatives in the United States
for J. and E. Sozio, Grasse, France
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Write for a complete list of Verona aromatic chemicals and specialties.

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Keeping Posted

Push Money Questioned

The matter of P.M.'s, or push-money, might be subject to change in this industry. This is for the reason that the Federal Trade Commission is studying a proposal to change the standard push money trade practice rule so far as the corset, brassiere and allied products industry is concerned. This new proposal, advanced at a recent conference on proposed rules for the corset, etc., industry would require posting of a notice in any store using P.M.'s. It appears that a decision on whether to adopt such a rule or not will be forthcoming within the next month or two.

It is anticipated that if the new rule is adopted, it would effectively kill off P.M.'s in the undergarment industry. But it is also anticipated that if the rule is applied in this one industry, it must be applied to others, and certainly it will be applied to cosmetics. This would mean that the use of P.M.'s by cosmetic manufacturers would be severely restricted and the practice would probably die.

There are those in the cosmetic industry who do not believe that P.M.'s, as they are now used, are legal, despite the FTC trade practice rule covering them. In fact one very able lawyer in the industry privately stated that he would dislike very much the task of trying to justify P.M.'s in court.

This is because P.M.'s might be considered illegal in one of two different ways, or in both. In the first place, P.M.'s might be considered as unfair competition with the manufacturers who do not use them, but more importantly, they might be considered as deceptive to the purchaser. This is for the reason that the person buying a product in the store assumes that the clerk is unbiased and is giving the purchaser his honest opinion of the relative value of the different competitive products. It is felt by many that the fact that the clerk is receiving money to sell one brand constitutes the practice of deception on the purchaser.

A.M.A. and Hormone Creams

The American Medical Association has, for many years, had a reputation for its memory. Having just about ruined the estrogenic face creams when they appeared on the market, they had to back-track and the product was generally accepted by all authorities as harmless. But even though the Food and Drug Administration has never disapproved the product, the state and city departments which took action against the product reversed their stand, the A.M.A. has never gone along and has always maintained a nagging attitude toward the product.

However, the original claim of the A.M.A. that the product was harmful and might cause cancer has constantly been successfully refuted. So now the A.M.A. takes the tack that the product is useless. In the Journal of the A.M.A. for May 8, 1954, there was published an article tending to prove that the addition of hormones to facial creams does not result in any greater improvement in the appearance of the skin than would the use of an ordinary emollient cream. The article is by Dr. Howard T. Behrman, a New York dermatologist, and a member of the A.M.A.'s Committee on Cosmetics.

Dr. Behrman bases his conclusions on a study of 27 women between the ages of 35 and 65 years who, for a period of three months, applied a hormone cream to one side of their faces and an ordinary cream to the other side each night before retiring. Said Dr. Behrman:

"No appreciable difference was visually observed in the side treated with an estrogenic hormone cream as compared with the side treated with either the identical base without hormones or a commercial night cream having a very similar composition to the hormone cream. In fact, the only significance observed on both sides of the face was encountered in the subjects with dry skins, namely in subjects in whom the skin felt and appeared less dry if either cream was constantly employed.

"This study demonstrated that noticeable improvement in the appearance of the skin can be obtained through regular use of an emollient cream in women with dry skins. This study did not demonstrate that the addition of hormones to such emollient creams increased this improvement to any discernible extent."

The fact that an estrogenic cream improves the ap-

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Illustration of a Fifteenth Century Pharmacy. Photo courtesy the Smithsonian Institution.

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pearance of the skin has been testified to by leading dermatologists of this country. In fact, such testimony was part of the record of the hearings before the Delaney Committee on chemical additives to foods and cosmetics. However, the dermatologists so testifying were not members of the A.M.A. Committee on Cosmetics.

This attack on estrogenic creams appears to be in the typical pattern of the A.M.A. If you cannot successfully attack a product one way, try another—but keep attacking. After all the A.M.A. Committee on Cosmetics must assert its authority over the cosmetic industry. And to indicate that this is the basic purpose of this attack on estrogenic creams, Dr. Behrman makes the following statements in his paper:

"In general, cosmetic preparations are of value from the standpoint of improvement in appearance if they actually perform this function. They are also indicated if their effects are primarily psychological or morale building rather than functional. It is difficult to delineate the exact margins of these separate concepts.

"The cosmetic industry by and large has had a progressive and farsighted policy that has included more extensive laboratory studies and pretesting of new products, improved educational standards for its technical personnel, and a self-imposed policing of its manufacturing aspects.

"It is recognized and accepted that a certain amount of puffery is necessary in the field of promotional cosmetic advertising. However, some manufacturers of creams containing estrogens have made claims, either directly or by innuendo, that overstep these limits."

F.T.C. Enforcing Cosmetic Rules

The Federal Trade Commission is taking definite steps to enforce the Trade Practice Rules for the cosmetic industry, FTC Chairman Edward F. Howrey told the members of the Toilet Goods Association last month. And Commissioner Howrey told just what steps are being taken and where they will lead.

Mr. Howrey said that last Fall the Commission studied the sales and merchandising plans of fifteen leading companies, and fourteen of them constituted "substantial compliance with the rules." Eleven of these were already in effect, two advised that their plans were not yet in full operation, and the position of one was complicated by an existing court decree. All were notified that the plans should be in effect by April 1. Said Mr. Howrey:

"The next step, just now undertaken, is to make a spot check in different areas of the country to ascertain if the sales plans, as reported, are in operation, what the effect thereof may be at the retail level, and whether current pricing practices and promotional allowances are in compliance with the rules. This investigation is not being limited to the fifteen companies but will cover the industry as a whole. A number of trading areas will be investigated—in the east, in the middle west, in the far west, and in the south. In each area the investigators will examine several of the large department stores, two or more drug chains, a representative number of independent drug stores, a small number of the leading beauty shops, and a small number of cosmetic wholesalers or jobbers. The data to be secured will include manufacturers' pricing schedules, discounts, freight allowances, promotional allowances, special deals, demonstrator services, and the like.

"From these facts the Commission should be able to ascertain whether the various manufacturers are adhering to the sales plans filed with the Commission, the extent, if any, of price discriminations, the availability and proportionality of advertising allowances, and the availability of promotional allowances for demonstrators, push-money paid to sales girls, and shop and counter display space.

"When this spot investigation has been completed the Commission will have the whole picture. It can then decide whether the trade practice rules have done the job or whether it must proceed on a wholesale case-by-case basis involving formal complaints. If the rules do not work you can rest assured, 'with all the hay that is down,' that the Commission will be compelled promptly to invoke its compulsory procedures. However, the fact that a few hard-core violations may turn up, requiring formal complaints, will not be enough to discredit the rules as a whole. One of the purposes of trade practice rules is to ferret out and pinpoint the willful violator."

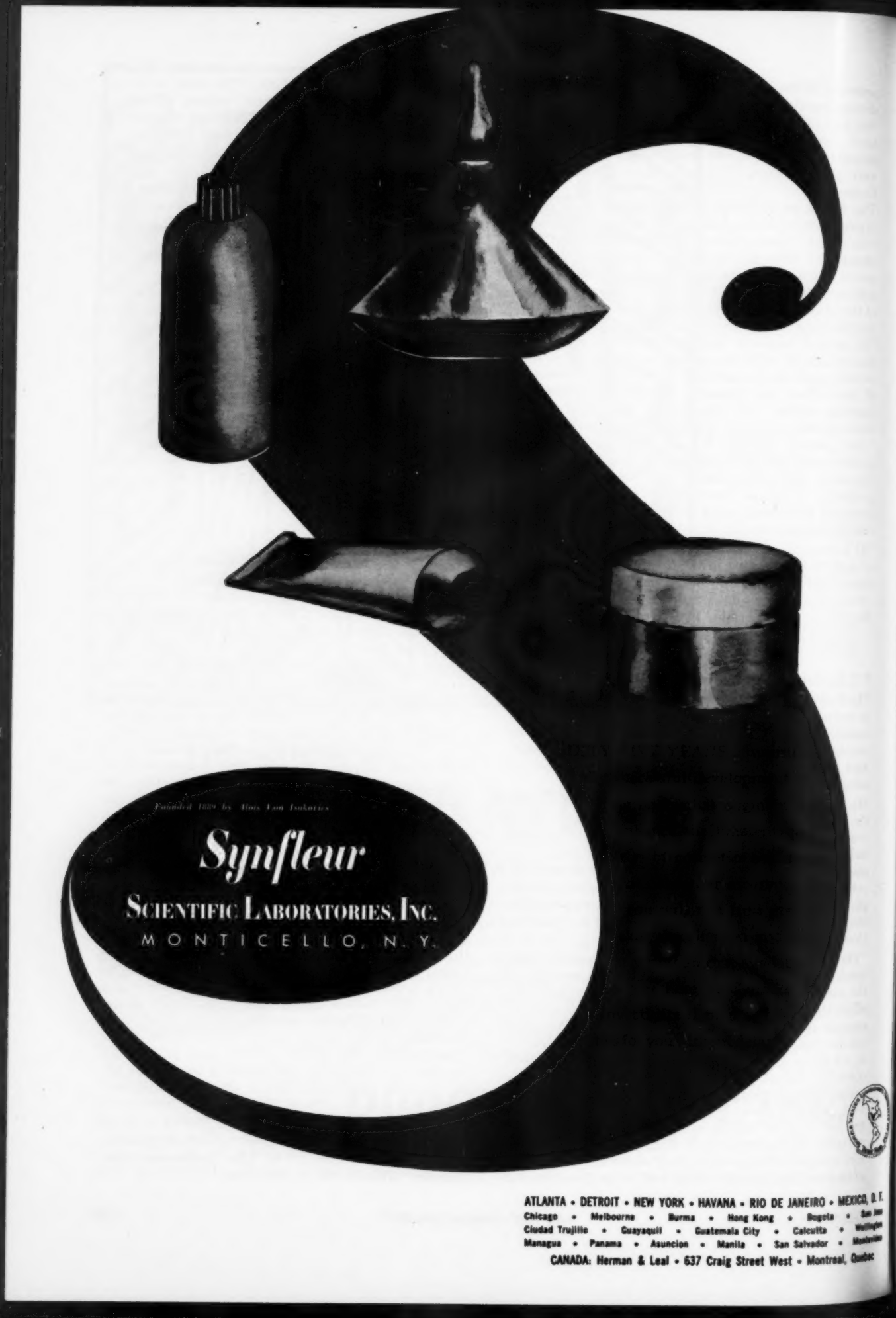
Procaine Penicillin Patent Dispute

Procaine penicillin has become the subject of court battle. Eli Lilly and Company has sued to invalidate a patent granted April 27 to Dr. Simon Ruskin, which patent was assigned to Physiological Chemicals Company, New Rochelle, N. Y., of which company Dr. Ruskin is president. The suit was filed in New York City in the U. S. Southern District Court.

A few hours later Physiological filed suit in Indianapolis in the U. S. Southern District Court, charging infringement of the Ruskin patent and asking invalidation of Lilly's 1951 patent on procaine penicillin. Dr. Ruskin and Physiological also filed a multi-million-dollar damage suit against Lilly. In one claim the plaintiffs charge "malicious interference" with the issuance of the Ruskin patent and ask $20 million damages. In another claim they charge restraint of trade and ask $20 million damages, with triple damages to be assessed. A legal spokesman for Lilly characterized the action for damages as "a nuisance suit utterly without foundation in fact."

The conflict between the two patents is technical. Lilly's covers procaine penicillin as a solid, while Ruskin's claims the procaine salt of penicillin. Physiological bases its "malicious interference" charge on Lilly's action in filing a public use proceeding in the Patent Office to show that procaine penicillin in solution had been used in public more than a year prior to the first filing for the Ruskin patent. The Patent Office agreed that a prior public use had been proved, but ruled that in its opinion the indicated use did not bar Ruskin from obtaining a patent. The Lilly suit challenges this view.

The "restraint of trade" claim is coupled to a charge that Lilly conspired with others to restrict procaine penicillin productions. The Lilly spokesman commented: "This charge is ridiculous."



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Fred Lawson Receives Alger Award

Recipient of a Horatio Alger Award in New York on May 6, was Fred A. Lawson. Mr. Lawson, president of The E. L. Patch Company, Stoneham, Mass., and a former president of the American Pharmaceutical Manufacturers' Association, was one of ten American businessmen and civic leaders selected for the awards by the American Schools and Colleges Association. At seventeen years of age, Mr. Lawson, following his graduation from Roxbury (Mass.) High School, was engaged by the Patch company as an errand boy. He has continued in the employ of this one company, becoming its president in 1951.

Retail Drug Store Picture

Ado Schumacher, president of Liggett Drug Company, told the Rutgers Pharmaceutical Conference last month that "the retail drug industry today is a rough picture," and he listed the following as "a few of the reasons:

1. Inadequately trained and inexperienced personnel. This is in all fields.
2. Poor Service. On this I could talk for an hour.
3. Ever-increasing costs everywhere: rents, lease hold improvements, fixturizations, signs, maintenance, repairs, taxes, insurance, warehousing, wages, freight transportation in and out—The whole ball of wax.
4. Impossibility of gaining a higher gross profit because other people's costs have gone up and basically, the true fact that a high percentage of our items have not had the advantage of proportionate increases in prices over the past 15 years in relation to increased costs.
5. The Super Market that is challenging us severely.
6. Decentralization from old-time crowded downtown shopping habits to the new shopping centers and to stores with adequate parking.
7. The five-day week wiping out Saturday and Sunday business in most large downtown Super Drug Stores.
8. TV: Enough said as to what this has done to night business and believe you me, it is here to stay.
9. The discount houses—a 5,000,000,000 dollar scrambling, rambling, and cancerous business which thinks that cheapness is a medal of honor and not a dying gasp of desperation and despair.

As to the drug stores of the future, Mr. Schumacher sees the following:

1. The "mama and papa" stores will always be here, but only eking out a very precarious and meager living in the future.
2. Good, ethical drug stores, both large and small, will increase in number and be profitable.
3. We will have the large Super Store in a downtown location with heavy traffic that will generate the volume necessary to carry the high tariff of installation, rent, and wages.
4. The Drive-in shopping center drug stores, and the drug store incorporated with and part of a Super Market. These will come and they will be big.

In the profitable operation of a standard, independent or chain drug store, Mr. Schumacher says that the following four strings to the bow are essential:

1. A fine prescription department.
2. Waste control in the Soda Department.
3. Inventory control throughout the rest of the store.
4. A complete "own-name" brand line of products with national acceptance which insures price maintenance at a satisfactorily high gross profit.

"It is a fallacy that drugs and medicines are as suitable as a proper subject for promotion and pushing as are potatoes or apples, ribbons or underwear," Professor Sol A. Herzog, of Columbia University College of Pharmacy, told the Rutgers Pharmaceutical Conference last month. Professor Herzog noted that all drugs and medicines contain powerful and potentially dangerous agents. "The essential point to be driven home to the public is that the pharmacist not only knows in advance of these limitations upon the handling and dispensing of articles of this sort; he is . . . immediately notified when a situation is discovered to be dangerous.

"The real reason for unrestricted sale of medicines is to get more money for their sale. That can be done only by straight commercial promotion, use of 'specials' and other pressure devices. That can only be done at the expense of the public's health," Professor Herzog added. But, he reminded pharmacists, "Pharmacy must change some of its habits and among them resist the self-service lure and resume personal contact."

The Prescription Business

"The annual growth rate for the ethical drug industry from 1939 to 1953 has been about 14 per cent," Vincent A. Burgher, vice-president of Ciba Pharmaceutical Products, told the Rutgers Pharmaceutical Conference. "This compares with about nine per cent for the proprietary drug industry. In 1937, prescription sales contributed only 13 per cent of the total drug store volume; in 1952 this figure was a whopping 24 per cent. Last year the gross profit realized by pharmacists on ethical drug specialties exceeded 300 million dollars.

"Medical research, supported largely by the pharmaceutical industry, has produced a flood of new specialties which are largely responsible for this tremendous growth in sales. The pharmacist is indebted to the manufacturer for very much of the growth in his prescription volume, for 80 per cent of the prescriptions filled today are for specialties of the pharmaceutical manufacturer. It has been frequently pointed out that 42 per cent of the prescriptions written today could not have been filled five years ago. Likewise, 85 per cent of the specialties in use today were unknown ten years ago."

Speaking on duplication, Mr. Burgher said:

"It is my opinion that you will find fewer duplicates as time goes on. The manufacturer is learning, or has learned, that there is little profit in *mass* duplication. His major profit comes from new and distinct specialties."

C.S.C. Antibiotic Award

Dr. Rollin D. Hotchkiss, discoverer of hitherto unknown factors in the development of resistance to antibiotics by the invisible organisms which attack man's health, was presented last month with the Commercial Solvents Award for Outstanding Research in Anti-

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biotics during 1953, by the Society of American Bacteriologists at its annual meeting. Dr. Hotchkiss, an associate member of the Rockefeller Institute for Medical Research, was selected for the award by the Society's committee headed by Dr. Thomas B. Turner of John Hopkins University. The award consists of a gold medal and $1,000.

Dr. Hotchkiss's investigations were on the basic mechanisms of antibiotic resistance and susceptibility in microorganisms. He worked principally with *Diplococcus pneumoniae* the organism causing lobar pneumonia, and with various antibiotics. One area of information from his studies suggests that factors other than in the antibiotic itself may influence the specific susceptibility or resistance to antibiotics by the microorganism.

For Radiation Sickness

Just when we are about able to forget the terrible consequences of possible use of the atom bomb and the H-bomb, along comes something to remind us of them. The latest is a chemical, Mercaptoethylamine Hydrochloride, "reported to be effective against radiation sickness." Evans Chemetics are the ones who told us about it.

F.T.C. and the Word "Free"

"Sell 12 dresses and get a $5.00 dress FREE!" In dismissing the old Cease and Desist Order against Modern Manner Clothes, the Federal Trade Commission says that it does not matter whether or not this dress is really free. Commissioner Albert Carretta, in the majority opinion dismissing the Order, says:

"It appears to us that respondents' offer of 'free' merchandise to their representatives upon the completion of a specified number of sales is clear and unambiguous. All of the terms and conditions are clearly set forth . . . There is no reasonable probability that anyone could misunderstand or be misled by the offer."

This decision by the Commission clearly illustrates the liberal, tolerant, realistic attitude adopted by the Commission as it is now constituted. So long as there is no attempt at deception, and so long as the terms of the offer of extra products is explicit, the word "free" can be used. Didn't the drug trade always call "three-free-with-a-dozen" "free goods?"

Fair Trade Builds Advertising

Effective fair trade stimulates more newspaper advertising of trade-marked products by department stores and manufacturers while absence of effective fair trade is accompanied by a decrease in such advertising, according to John W. Dargavel, chairman of the Bureau of Education on Fair Trade, and executive secretary of the N.A.R.D. Mr. Dargavel's statement is based on a Bureau study entitled Fair Trade and Newspaper Advertising.

Using data on newspaper advertising linage provided by Media Records from its own standard 51-city sample, the Bureau findings show that department store newspaper advertising in 44 cities in fair trade states declined 14 million lines, or 3.1 per cent, during the year (June 1951-May 1952) when fair trade was weakened by the U. S. Supreme Court Decision in the Schwegmann case. During this same period, department store newspaper advertising in seven cities in non-fair states increased by 2.9 million lines, or 3.5 per cent.

The study notes: "This difference in performance is the more striking if we accept the performance in the non-fair trade area as an index of general business conditions. When the strength of fair trade was restored, department store advertising in fair trade city newspapers increased 4.5 million lines, or 1.1 per cent, whereas similar advertising in non-fair trade city newspapers increased only 200,000 lines, or 0.02 per cent. Department store advertising contributes more to the total advertising linage of daily newspapers in the fair trade cities of the country than of those in the non-fair trade cities, the study revealed.

Doubtless this report will tend to create increased support for fair trade on the part of the daily newspapers of the country.

Armour Helps Reese Polio Vaccine

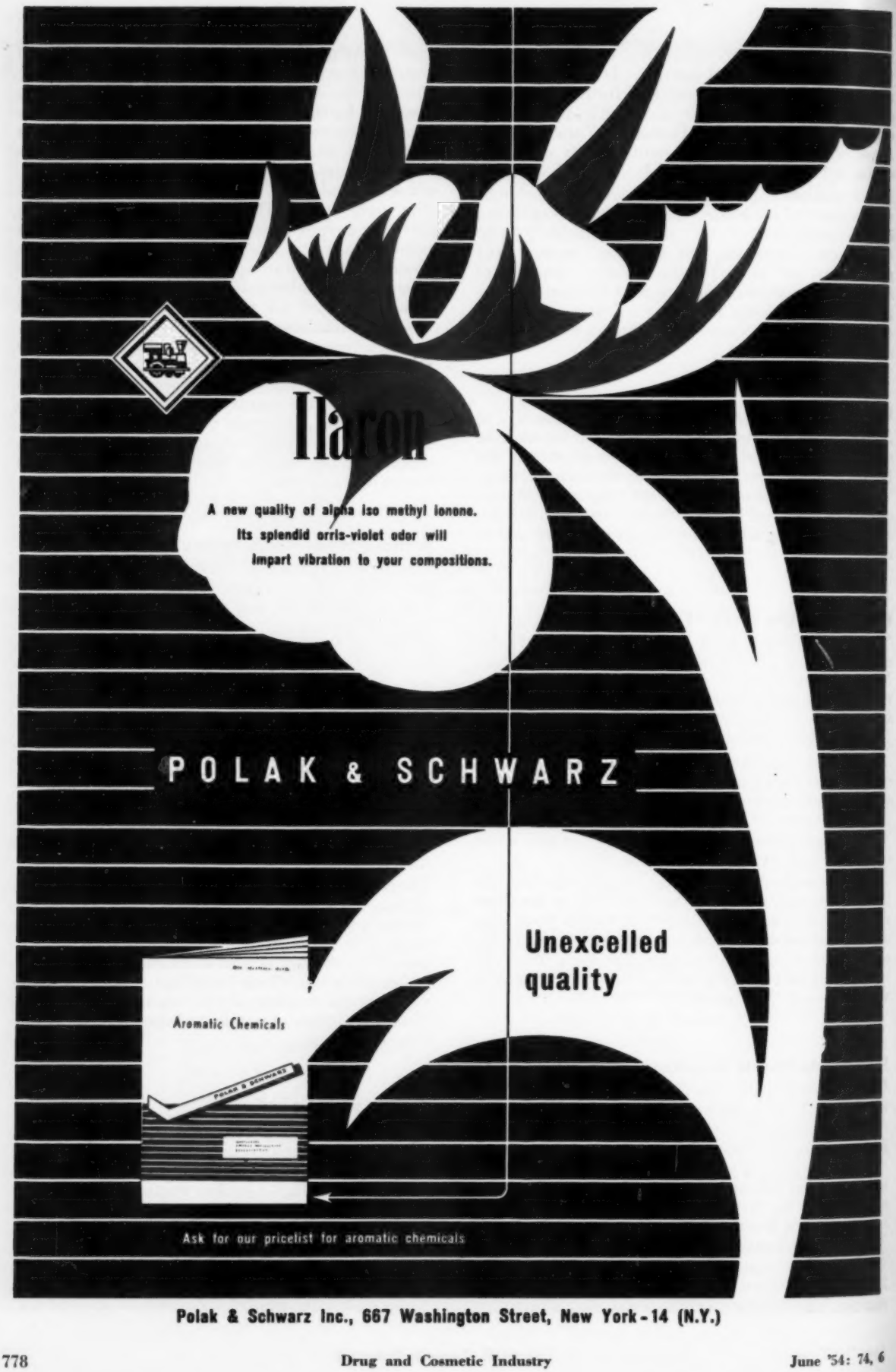
Armour Laboratories is continuing its grant-in-aid to the Michael Reese Research Foundation for a two-year research program on a new vaccine against poliomyelitis. The vaccine, which is polyvalent, or effective against all three strains of the polio virus, has been developed through more than fifteen years of research, by a team of specialists from the Reese Foundation staff. Sidney O. Levinson, M.D., is executive director of the Foundation.

The Reese vaccine, like some other polio vaccines, consists of killed poliomyelitis virus grown in monkey kidney tissue. It differs from other vaccines, however, in the fact that the virus is killed with ultraviolet irradiation, rather than with chemicals. (In preparation of the Salk vaccine, the virus is killed with formaldehyde).

The treatment destroys the power of the virus to cause disease, but it does not destroy its power to stimulate the body's own cells to produce antibodies against the virus. The Reese research is largely directed at establishing the efficacy of this ultraviolet-treated vaccine in human beings. Tests on groups of children, begun with the cooperation of the Department of Public Health of Illinois, are already under way in Morgan County, Illinois.

Dentists in the U.S.

The United States has 93,726 dentists—one for every 1,677 persons—according to the American Dental Association. The 1954 edition of the American Dental Directory lists 85,970 civilian dentists and 7,756 dentists serving the armed forces, the Veterans' Administration and the U. S. Public Health Service. Additionally there are 599 dentists in U. S. territories and possessions. The latest count shows 2,957 more dentists than were listed in 1953 when there was one dentist for every 1,691 persons.



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Generally, the East Coast and the West Coast areas continue to be served by more dentists in proportion to the population than any other section of the country. The most favorable ratio continues to be found in the region that includes Delaware, the District of Columbia, Maryland, New Jersey, New York, Pennsylvania, and West Virginia. In this area there is one dentist for every 1,413 persons.

However, the New England states overtook the Far West for second place with one dentist for every 1,514 persons. In the Far West, including California, Nevada, Oregon, and Washington, the ratio is one dentist for every 1,526 persons.

Although the Southeast continues to have fewer dentists in proportion to population than any other section, the ratio of one to 3,292 compares favorably with that of a year ago when one to 3,468 was reported. For other areas of the country, the population per dentist was reported as follows: Central States, 1,671; Northwest States, 1,868, and Southwest States, 3,068.

Among states, New York led the country with a ratio of one dentist for each 1,133 residents. However, the District of Columbia for the second year continued in first place with one dentist for each 1,071 persons. Minnesota remained in second place at one to 1,328; and Connecticut in third place at one to 1,354. Massachusetts replaced Nebraska in fourth place with one to 1,422. The least favorable states, according to the report, were South Carolina with one to 5,166; and Mississippi with one to 4,328.

About Fluoridation

The American Dental Association, through its Journal, has sharply criticized what it calls "efforts to use Congress as a sounding board for emotional and unscientific charges on a public health measure."

Referring to a bill that seeks to prohibit fluoridation of public water supplies, on which hearing were held at the end of last month by the House Committee on Interstate and Foreign Commerce, the Journal says editorially: "The results of research are not determined in congressional halls but in the laboratories and field studies of the scientists."

The publication said that while the dental profession welcomed the opportunity of presenting evidence on water fluoridation for the prevention of dental decay, it was disturbed that a scientific procedure should be subjected to politics.

"The dental profession is concerned that a committee of the House of Representatives should reinject into the political arena a non-political issue which already has been decided by more than 40 years of scientific research," the Journal said. "Fluoridation is a technical process. Certain basic knowledge of epidemiology, chemistry and biology is essential for a complete understanding of its practicability as a preventive of dental caries."

The editorial suggested that since the measure is before congressmen, they might be interested in the findings of the National Research Council, founded as an offshoot of the National Academy of Sciences which was established by an act of Congress nearly 100 years ago. The editorial pointed out that in the past three years, the council twice had thoroughly investigated the fluoridation measure. The editorial also cited a recent special report of the St. Louis Medical Society on the health aspects of the measure.

"Reports such as these, representing many months' work by highly qualified scientists, should be given the most careful thought and consideration by those in the executive and legislative branches of government," the editorial said. "Certainly such groups would not compromise for a moment with a proposition scientifically unsound or dangerous to the health of the people."

A Chlorophyll Battery

While chlorophyll's great publicity of recent times has been due to its odor-suppressing capabilities, the possibility of a chlorophyll battery is regarded as "definitely within the realm of high probability," according to Howard E. McMinn, professor of botany at Mills College. Dr. McMinn said last month that "scientific studies eventually will discover chlorophyll's secret for harnessing the energy of the sun."

"The car of tomorrow might have a chlorophyll battery, and gasoline would have a powerful competitor," he said. "Discovery of chlorophyll's secret would unleash all sorts of wonderful new potentialities for the benefit of mankind.

"If the chlorophyll pigment can force sun-power to manufacture food in green plants, then why cannot we make that same energy run our automobiles as well?"

Buyer-Induced Price Cuts

The Federal Trade Commission recently ruled that the Supreme Court decision in the Automatic Canteen case has in no way ended Commission prosecution of price discrimination induced by the buyer. The Commission has refused to dismiss a complaint against a group of Southern auto parts jobbers who were charged with inducing, through their mass buying power, discriminatory price cuts by sellers, in violation of the Robinson-Patman Act.

Generally, Robinson-Patman Act cases are brought against the seller, though "buyer-induced" price discrimination is also banned by the Act. The Automatic Canteen case was the first real test of the "buyer-induced" section of the Act. The Supreme Court overturned the Commission, holding that the Commission must prove that the buyer had induced a price cut which he knew at the time was illegal.

As a result of that case, the Commission promptly dismissed a number of other cases that were then in the mill. Because of these previous dismissals, the auto parts jobbers also asked for dismissal. They pointed particularly to Commission dismissals of "buyer-induced" cases against Safeway and Kroger stores.

In the decision refusing dismissal, Commissioner Albert A. Caretta pointed out that the Safeway and Kroger cases were dismissed because Commission lawyers conceded that they could not prove the necessary knowledge on the part of the defendants.

Bettmon Archive

KNOWN BY REPUTATION

GALEN (131-201 A.D.), noted Greek physician and voluminous writer on subjects of medicine, philosophy, logic, ethics and grammar. Of his works, 83 treatises still exist. Illustration shows Galen when he was a physician to the gladiators at Pergamum.

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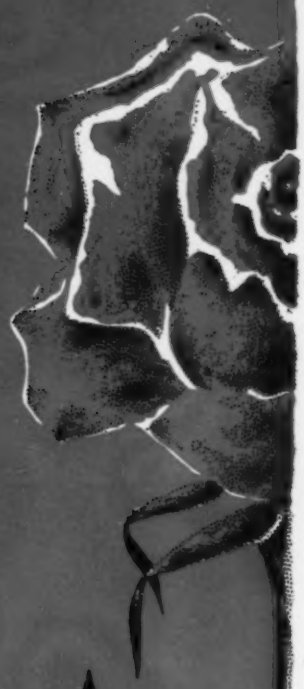

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McDonough Hair-waving Patent Invalidated

by Thomas Cifelli, Jr.

COURTESY HELENA RUBINSTEIN

It probably will come as a surprise to very few to learn that the report of the Special Master (February, 1954, issue of This Journal) was upheld by Judge Kaufman. In a sixteen page opinion handed down on April 30, 1954, the Judge adopted all of the Master's recommendations.

In view of the fact that extensive treatment of the Master's report was given in February, 1954, and the fact that the Judge found nothing in the report to criticize, there does not appear to be any point in quoting from the long court opinion. However, some of the Judge's comments appear to be of general interest and will be passed on.

The Claimed Invention

The Judge turned down Sales Affiliates' (the patent owner) contention that McDonough's invention was discovery of certain critical limits for mercaptan waving—points at which there occurs some results differing in kind, not merely in degree, from the results achieved by the prior art. The Judge found that neither McDonough's original application nor his patent discloses or teaches that any particular factor—be it pH, concentration, molecular weight, or kind of base—is critical in mercaptan permanent waving. The Judge further held that at the time McDonough made his application he was asserting as his invention not the discovery of critical limitations but the broader discovery of mercaptans as waving agents.

The Judge further held that even if it were assumed that McDonough's limits were disclosed as critical, Helene Curtis and Gillette effectively proved that they were not critical in fact.

Pre-Filling Invention Date

The Judge reviewed certain evidence which McDonough had presented to show that he had satisfactory waving lotions prior to his invention date and found adversely to McDonough on this point.

The Prior Art

The Judge reviewed the prior art and agreed with the Special Master that McDonough's claims could not be upheld by reason of prior patents and publications as well as prior public uses by contemporaneous workers in the permanent waving art, namely Martin and Grant. *(Continued on page 891)*

COURTESY HELENA RUBINSTEIN

Aerosol Hair Lacquers

by Harry Hilfer

Aerosol preparations in the cosmetic field have assumed an important place in the general cosmetic picture in a relatively short space of time. They have been marketed as shaving creams, hair lacquers, sun screens among others and appear to be more than a passing fancy. Perhaps, the most adaptable product of this type is the hair lacquer because of its ease of application as compared to the older types of lacquer preparations.

The conventional hair lacquer which preceded the aerosol types consisted of solutions of shellac soaps in a hydro-alcohol solution. These preparations served their purpose very well except for the difficulty in their application. In transferring this idea to an aerosol preparation several difficulties become apparent. To effect complete compatability between the solution and the gas, water would have to be eliminated, since a two-phase system would otherwise result. In addition if too large a percentage of propellant were added to an alcoholic solution of the shellac, precipitation of the shellac would occur causing difficulties in operating the valve. Too high a concentration of alcohol would introduce the individual torch effect caused by the alcohol.

For these reasons a shift towards use wholly or in part of polyvinylpyrrolidone took place.

The mechanism of the aerosol spray container in most common use for cosmetics is dependent on a container capable of holding the liquids at the desired pressure, a nylon valve with a hose reaching to almost the bottom of the container, activated by a stainless steel spring. In filling, the necessary amount of the alcoholic solution of the lacquer components is poured into the container, followed by the introduction of the propellant. The container is filled perhaps to two-thirds of capacity so that a conveniently large pressure area may be maintained. The completed assembly is then checked in a water bath at 120° F. to ensure absence of leaks.

Absolute alcohol is used universally since even the smallest concentration of water would cause a two-phase system to form. In addition water is sufficiently reactive with the most widely used propellants to cause a hydrolysis with hydrochloric acid forming as an undesirable by-product. Its presence would cause quick corrosion of the can, unless it were properly coated, and possible leaking. The propellants in most common use are di chlor fluor methane and tri chlor mono fluor methane, both of which are subject to hydrolysis in the presence of water. A third type—tetra fluor di chlor ethane, is at the moment scarce but promises to be more readily available in the near future, because of increased manufacturing facilities becoming available. Its use because of its scarcity is limited to aqueous foam preparations, since it shows a greater resistance to hydrolysis than do the two previously mentioned. The di chlor di fluor methane has the lowest boiling point of the three and is commonly used in conjunction with mono chlor tri fluor methane to give the best results.

There has been some publicity given to the torch effect of some of the aerosol preparations on the market. Most manufacturers have therefore reduced the alcoholic concentration of the finished preparation to below 20 per cent so that the propellants which are non-inflammable would overcome the flicking tendencies of the alcohol present. Under these circumstances the tendency to flash because of the proximity of an open flame or a lit cigarette during application has largely been removed.

Polyvinylpyrrolidone or P V P, as it is commonly referred to, is soluble in both alcohol and water and is capable of being deposited in a clear lustrous film though somewhat brittle. In formulation of hair lacquers the introduction of a plasticizer is therefore indicated as well as some means to protect it from moisture which if it comes in contact with the film will remove it rather quickly. A large number of plasticizers are therefore being used which not only soften the film but act to some extent as water repellents. The iso propyl esters of the relatively low molecular weight fatty acids are being used satisfactorily as are some of the lanolin derivatives. The important consideration in their choice is to be certain that they are completely soluble in both the propellant and absolute alcohol. Also to be sure that they are compatible with the PVP in addition.

In some formulations, the water repellent characteristic is provided by the introduction of shellac in conjunction with the PVP. Here again the concentration of alcohol must be high enough to insure complete solubility of the shellac in the propellant alcohol solution. PVP, however has the added advantage of depositing a more highly lustrous film than is possible with shellac and in spite of its greater solubility in water it is gradually being used in greater quantities.

One of the advantages in the use of absolute alcohol is that substances normally insoluble in 95 per cent commercial alcohol are readily soluble in the absolute alcohol. Many of the common cosmetic materials thought of as insoluble in alcoholic preparations may therefore be readily used. The propellants themselves are good solvents for lipoids, since they possess much the same solvent characteristics of other common chlorinated hydrocarbons. It is well to remember that the propellants in the container and under the pressure they are subjected to are in a liquid phase and therefore behave as solvents in much the same manner as does carbon tetrachloride. From a production standpoint, however, it is easier to effect solution of the lacquer components in the alcohol beforehand since there is no problem involved in keeping the solvent under pressure or under refrigeration during the processing period. If the manufacturer should decide that it would be to his advantage to incorporate a component soluble in the propellant and not soluble in alcohol in his product, this may be accomplished by transferring some of the propellant to a pressure containing suitable stirring equipment and previously adding the proper quantity of the component.

Aerosol preparations of the hair lacquer type are new and there is no doubt that improvements will take place in their formulation as time goes on. Since the advent of PVP as the prime film formerly in use for this purpose much of the work being done to improve the properties of the film lies in the direction of improved water repelling so that the film may not be too easily removed by casual contact with moisture. With the advent of silicone as a regular commercial commodity, its inclusion does not appear to be an impossibility—certainly it seems practicable since the advent of the alcohol soluble type. Work is being carried out in this direction and if it is at all comparable with the other components its introduction should show a marked improvement in the water repellency properties of the film, indeed theoretically it may be expected to withstand water almost to the same extent as a water insoluble film.

The propellants now in use have been taken from the refrigeration industry for which they were designed originally and though the transfer has been largely successful there may be further developments of these substances which would be more suitable for the cos-

(*Continued on page 893*)

Baby Specialties

CONDENSED FROM FORTHCOMING BOOK

by Wm. R. Keithler

The importance of baby cosmetics has become very significant in the last decade, for the mother and baby as well as the manufacturer. It is indeed important for the mother to feel that her baby is getting the right care, and she has come to depend a great deal upon the oils, lotions, and powders, for the prevention of infection, as an aid in cleanliness, and to assist in the baby's comfort.

It is always a good point to stress the necessity of using only the very purest of raw materials in baby products. Actually, there is not too much difference between the products designed for adults, and those designed for infants. The main difference is in perfuming of the product. Perfume, or more accurately, certain ingredients in perfume, are strong irritants, and a great many of them are sensitizers. For this reason, the majority of baby products are unperfumed. Speaking from experience, the author suggests that all baby products shoud be marketed without perfume. To be included in the classification of baby products are powders, lotions, creams, and oils.

Several investigators have reported on the efficacy of certain raw materials used in the manufacture of baby powder. Starch, for instance has been the subject of wide controversy. Some workers feel that, being organic, starch may undergo decomposition, leading to irritation or dermatitis. Still others contend that its incorporation into baby powders is beneficial, and indeed, several pediatricians recommend its use. Starch acts as an excellent absorbent in this type of product.

This same feeling has existed with regard to the use of boric acid. However, this matter is now a closed issue, as the FDA has recently issued a statement concerning its use. The statement reads as follows:

"The Food and Drug Administration has investigated the use of talcum powders prepared with five per cent boric acid powder and finds there is no hazard in the use of these products. Borated talcum powders with five per cent boric acid have been in use for many years as dusting powders for babies. Clinical, animal, and chemical research investigations as well as consultation with leading medical authorities who have conducted research in the field of baby talcs confirm their safety."

Many of the baby talcs are "super-fatted." This presumably assists in relieving dried scaly skin. However, it is difficult accurately to judge the effect of these powders upon the dried skin, as in many cases their use is accompanied by another baby product, such as oil or lotion.

The following formulae are excellent examples of both the regular baby talc, and the "super-fatted" types:

No. 1
BABY POWDER

Talc	46.0 per cent
Kaolin	21.0 " "
Magnesium Stearate	5.0 " "
Magnesium Carbonate	7.0 " "
Boric Acid	5.0 " "
Corn Starch	16.0 " "

The ingredients are sifted into a powder mixer and mixed for about one hour. The resulting powder is milled or comminuted and packaged in clean, preferably sterile, containers.

No. 2
SUPER-FATTED BABY POWDER

Talc	67.0 per cent
Glyceryl Monostearate	2.0 " "
Cetyl Alcohol	2.0 " "
Magnesium Stearate	6.0 " "
Kaolin	18.0 " "
Boric Acid	5.0 " "

Use the same manufacturing procedure as indicated in formula No. 1, above.

Although it is seldom stressed, there is a need for hair oils, designed to assist in training a youngster's hair. Few, if any, products of this type are in existence. Most parents use plain mineral oil or baby oil for this purpose, while a few use the adult type preparations

COURTESY UNION CARBIDE & CARBON COMPANY

such as cream hair tonics and brilliantines. More often than not, the latter types of products cause allergic or sensitizing dermatitis, while the former are much too oily and greasy, and on the whole do not perform the function of keeping the hair in place. For this reason, it is suggested that anyone interested in marketing a product designed to train a child's hair, do so, as there is an almost completely open market for this type of product. The following formula is suggested for a cream hair oil:

No. 3

HAIR DRESSING FOR CHILDREN W/O

A	Petrolatum	8.0 per cent
	Mineral Oil	30.0 " "
	Lanolin	3.0 " "
	*Arlacel C	3.0 " "
	Beeswax	2.0 " "
	Isopropyl Palmitate	7.0 " "
B	Borax	0.5 " "
	Water	46.5 " "

*Atlas Powder Co., Wilmington, Dela.

Heat A to a temperature of 75° C. and B to the same temperature, in separate containers. Add B to A slowly, with continuous, thorough agitation. Continue stirring until the cream is cool.

This cream should not be perfumed. It is a water-in-oil emulsion, and possesses sufficient tackiness to provide proper hair grooming, without excessive oiliness. There are no primary irritants in this formulation, so that dermatitis from its use will be of a low order; this statement excludes allergic dermatitis.

Probably the most important baby specialty, at least from an aesthetic standpoint, is baby oil. It is used in hospitals during the early days of newborn infants, as a cleansing agent. According to many workers, its use helps to prevent certain skin disorders.

After the baby is taken from the hospital, the use of baby oils usually continues. They are applied after the bath, as an aid in the prevention of chafing. They are also used as cleansing agents, when the use of soap and water is contraindicated, or to aid in removing fecal matters. They also help to some small extent, in preventing diaper rash, but are not completely effective in this respect.

There is probably more competition in the manufacture of baby oil, than in any other baby specialty. This competition does not stem from fellow baby product manufacturers, but from companies producing USP grades of mineral oil. Many women use U.S.P. Mineral Oil in preference to baby oil. The primary reason for this is cost, and there is no reason why a good grade of mineral oil cannot function as a baby oil.

Indeed, the majority of baby oils now available are based upon mineral oil (65-80 viscosity), with an added emollient, such as lanolin. One of the leading products is merely a mixture of mineral oil and lanolin.

(*Continued on page 885*)

T.G.A. Meeting

Left to right: Pierre Harang, president, Houbigant Sales Corp., re-elected vice-president, T.G.A.; John A. Ewald, president, Avon Products, Inc., new T.G.A. president; and Jean Despres, vice-president, Coty, Inc., re-elected vice-president, T.G.A.

Hailing 1953 as the second consecutive year in which over a billion dollars worth of cosmetics were sold at retail, retiring Toilet Goods Association President Davis Factor said most channels of distribution showed an increase, with the exception of a small decline in drug store and variety store sales.

"Altogether, though, the trend continues upward," said Mr. Factor, "and with continued effort to improve merchandising policies and practices, and with the cooperation of our friends in the retail outlets, the progress of our industry will continue."

Mr. Factor warned against complacency, saying that "the future requires even more imagination and resourcefulness than in the past. The competitive spirit of our industry is greater than ever, and the share for each of us in cosmetic dollars is only what we ourselves would make it. Our markets are growing in numbers, and we are still far away from what any of us could reasonably term a point of saturation. This will never come as long as we continue with the thought uppermost in our minds that our products must deliver to the consumer real and recognizable results with which they can achieve greater beauty, attractiveness and better grooming.

"We must not stop our creative efforts simply with our products and package, but must move forward in the presentation and promotion of our products to the consumers; in this phase the wholehearted cooperation of our friends in the retail part of the industry is required. For they, too, can reap the benefits, and every alert individual in the retail activity of the cosmetic industry knows full well that there is still a tremendous potential that has not been touched and is waiting to be realized by those who have the will to reach out."

T.G.A. Executive Vice-president S. L. Mayham reviewed the problems of the past year starting with the excise tax which was cut from 20 per cent to 10 per cent after much hard work. After discussing the working out of an understanding between the Federal Trade Commission and the manufacturers of the so-called indelible or non-smear lipsticks, Mr. Mayham spoke on the FTC Trade Practice Rules.

Some progress has been made in clearing up the muddied situation with respect to the rules, said Mr. Mayham, but it is not as great as either the industry or the Commission would have liked it to be.

"Almost all of the manufacturers have developed merchandising plans under the rules," said Mr. Mayham, "and I am advised that the great majority of these plans are satisfactory to the Commission. The attitude of many of the retail stores, as many of you know, has not been very cooperative. In some cases cooperation has been lacking to the point where legal merchandising plans could hardly be installed. . . .

"At the same time the situation has been complicated to some extent by recent decisions. In the first place in a recent public address, Commissioner Carreta announced what should have been known to everyone anyway, that the rules could be enforced against industry members regardless of whether they participated in the Trade Practice Conference at the time the rules were considered, or whether they accepted the rules after they were promulgated. I say it should have

(Continued on page 788)

been known to anyone on the basis that the rules are merely a restatement of the law governing trade practices and that everyone is bound by a law even though he may not like it or agree with the economic or legal theories which underlie it.

"Then there was a decision in a case involving price discrimination under section 2(a) of the Robinson-Patman Act in which the Court held that the Commission on violations of this section must prove an adverse effect upon competition. In other words it was not sufficient merely to prove that there had been a discrimination in price as between two customers but an adverse effect upon the competitive situation also had to be proven. It is notoriously difficult to prove in a legal sense that any action has or has not an effect upon competition. Now this case was brought, as I have said, under section 2(a) which covers price discrimination. What we are generally up against in this industry are discriminations in the furnishing of service and facilities (P.M.'s advertising allowances and the like). It is generally felt that price discrimination is a more serious offense, so whether the courts would carry the reasoning of this decision over to cases under sections 2(e) and 2(d) which are the sections relating to services and facilities cannot be said at this time. If it should be carried over to these two sections, it is not too strong a statement to say that the enforcement of the key provisions of the Trade Practice Rules would become so difficult for the Commission, as to make enforcement virtually impossible."

Mr. Mayham reviewed the action of the Food and Drug Administration with regard to coumarin and certified colors. With regard to the certified colors he pointed out that the Food, Drug, and Cosmetic Act calls for separate classifications of colors, one for foods, one for drugs, and one for cosmetics. This was never carried out, the FDA setting up three classifications as follows: 1. Colors suitable and harmless for use in foods, drugs, and cosmetics; 2. Colors not harmless and suitable for use in foods but harmless and suitable for use in drugs and cosmetics; and 3. Colors not considered suitable and harmless for use in any product to be taken internally but suitable and harmless for use in externally applied drugs and cosmetics. Mr. Mayham pointed out that in decertifying certain colors and thus outlawing their use, the FDA gave no consideration to the fact that these colors—which had been allowed to be used in foods, drugs, and cosmetics—to the fact that they were still harmless for inclusion in cosmetics. If the final decision of the FDA is complete elimination of these colors, Mr. Mayham said that the Board of Directors of the T.G.A. had given him the authority to take whatever steps are necessary to try and have these colors reinstated for use in cosmetics.

T.G.A. Scientific Director Harold D. Goulden noted that this year marked the tenth anniversary of the Scientific Section of the Association. With regard to company research, Mr. Goulden said:

"Research may be sound, well managed and directed, add to scientific knowledge and even result in useful new products, but unless it contributes to the progress of the company, it cannot be considered as a good investment by the company. Thus is emphasized the need for scientific analysis of research.

"There is another type of research that should be seriously considered by members of this industry, namely industry-sponsored research. In every industry there are industry problems, the solution of which is pending for lack of industry-sponsored research.

"The products of this industry are, in general, designed for topical application. They are applied to the skin. Fundamental research designed to learn all there is to be found out about the skin and its functions is of primary importance. Research designed to establish the physiologic effects, the fate, the mode or mechanism of the action of substances applied percutaneously is certainly within the field of industry-sponsored research. Such research leads to more intelligent formulation since it is based upon knowledge. We, of course, refer to the substances in general use by the industry and therefore of interest to the whole industry. There are specialized problems which beset large and small segments of the industry, groups, if you will, that make a particular type of product. The cooperative sponsoring of research by these various groups offers a means of solving group problems."

Expressing industry gratitude to the men who comprise the Scientific Advisory Committee, and to the companies in which these men are employed, Mr. Goulden had the following to say regarding the establishment of raw material standards by this committee:

"The completed standards are hardly an indication of the large amount of experimental work that is involved in arriving at a satisfactory standard. Such work may be continued well over a year. During the past year eight standards have been issued covering palmitic acid 70 per cent to 95 per cent by five per cent increments, aluminum chlorhydroxide complex and carnauba wax. Since we are concerned with the development of standards which are useful and needed by the industry, we always welcome suggestions for new standards to be developed."

Federal Trade Commission Chairman Edward F. Howrey outlined the steps which led up to the Trade Practice Rules for the cosmetic industry, and he outlined the steps being taken to enforce the rules.

Commissioner Howrey explained that last Fall careful examination of the plans of 15 major companies was made, and it was the opinion that 14 of these constituted compliance with the rules. Eleven of these companies already had their plans in operation, two were placing their plans in operation but had not yet completed the task, and the remaining company's position was complicated by a court decree. All were notified that the Commission expected the plans to be in full effect by April 1.

The next step, which Commissioner Howrey said had "just now been undertaken," is to make a spot check in different areas of the country to ascertain

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Up-to-Date on Vitamin C PART II

by Milton A. Lesser

Vitamin C plays a very prominent role in therapeutic nutrition and is a valuable adjunct in the treatment of a variety of disorders. Thus, it exerts a strong influence on the detoxification process and on the colloidal condition of the intercellular substances. It has an important function in the healing of wounds. Prolonged ascorbic acid deficiency leads to increased fragility of the capillaries and impairment of tissue reparative powers. Depletion may also contribute to lowered bodily resistance to infection.[37] Vitamin C deficiency may also be associated with loss of appetite, loss of weight or failure to grow, muscular weakness, anemia, and skin lesions. In general, as remarked by King,[39] there is good evidence that moderate deficiencies impair health without giving rise to the classic signs of scurvy.

Of course, prolonged severe vitamin C deficiency will lead to frank scurvy. Although scurvy is no longer a major disease, severe cases are sometimes seen in nearly all medical centers and many mild cases remain undetected. However, as noted by Dogramaci,[61] scurvy is still a reasonably frequent disease in pediatric practice. Thus, in presenting three case reports, Ellenbogen and his associates[62] observed that infantile scurvy develops in formula-fed infants who for a variety of reasons receive insufficient vitamin C supplements.

In an analysis of 100 consecutive cases of infantile scurvy, Tisdale[63] found that the condition occurs most frequently between six and 12 months of age. It is almost unknown under five months of age and is rarely seen over two years of age. The disease responds to therapy in a dramatic manner. The administration of four to eight ounces of orange juice daily in divided doses, or 300 to 500 mg. of ascorbic acid in tablet form, will cause pain to subside in 24 to 48 hours. The gums show decreased redness, swelling and tendency to bleeding within 72 hours.

The relationship between vitamin C and the health of the gums and teeth has long been recognized. Laboratory studies[64] on gum-teeth connective tissue have reaffirmed this relationship. A survey[44] of New Mexico school children also adds evidence to this association. Analysis of the data indicates that a deficiency in ascorbic acid intake appears to be an important factor in the development of spongy gums and red eyes in the areas studied. The evidence showed that gum changes are cumulative over a period of years. Children just entering school very rarely show severe sponginess regardless of serum ascorbic acid and levels, but by the time they reach adolescence, severe sponginess is likely to be found. It is even more likely for adults if their vitamin C intake has always been low.

Schumacher[65] has found that the pre-operative use of vitamin C in 500 mg. oral doses was remarkably successful in preventing shock and weakness following dental extractions. He also found that the immediate

administration of 500 mg. of the vitamin to a variety of accident cases decreased shock and improved the patient's general condition. A series of 50 major abdominal operations on patients to whom 500 mg. or more of ascorbic acid in sterile buffered solutions was administered intravenously, both pre- and postoperatively, produced excellent results.

More recently, Zoll and his associates[66] showed the advantages of the pre- and postsurgical use of intravenous infusions of glucose plus a complete multivitamin formula, which included 500 mg. of ascorbic acid. They observed a definite decrease in the incidence of postoperative nausea and vomiting and an increased feeling of well-being in the majority of patients. In addition, would healing was stimulated beyond that previously seen before the intravenous vitamin therapy was instituted.

Of course, it has been shown in both laboratory and clinical studies, that optimal primary wound healing is dependent to a large extent upon the vitamin C content of the tissues. Indeed, after their studies on experimental wounds, Schilling and his associates[67] came to the conclusion that vitamin C seemed to be "the most important single substance in fibrosis and collogen formation."

Also significant are the conclusions reached by Pirani and Levenson[68] following investigations of the effect of vitamin C deficiency on healed wounds. In their opinion, adequate ascorbic acid intake is needed, not only for normal healing in the early post-wound period, but also for the maintenance of the scar tissue which has formed in healed wounds over a period of many weeks.

The treatment of burns similarly requires the administration of large ascorbic acid supplements. It has been found, note Pollack and Halpern,[27] that after severe burns the blood ascorbic acid concentration and the urinary excretion may fall rapidly to zero. It has been suggested that, in burns and other extensive surface injuries, vitamin C is diverted from the remainder of the body to the injured areas. Hence, in the presence of burns or extensive tissue damage, up to 1,000 mg. of vitamin C daily should be given during the acute phase and 300 mg. daily until convalescence is established.

The value of ascorbic acid in the treatment of burns is well illustrated in Klasson's[69] indicative report in which he stated that the vitamin was used both topically or by mouth or parenterally. Clinical observations showed that ascorbic acid is capable of alleviating pain in minor burns, hastens healing, aids in combatting the accumulation of toxic protein metabolites in the severely burned, and reduces the time interval necessary for skin grafting.

Providing prompt alleviation of pain, the vitamin was applied topically in the form of a one per cent solution of ascorbic acid in normal saline or distilled water or as a two per cent ascorbic acid ointment in a water-soluble base. Klasson makes note of the fact that the hoarseness and pain resulting from swallowing smoke may be relieved in a short time by either gargling or spraying the throat with a one per cent solution of ascorbic acid in normal saline.

It is recognized that severe ascorbic acid deficiency leads to heightened susceptibility to infections. Conversely, the presence of infection may increase the requirement for vitamin C.[38] Fever, which so often accompanies acute infections, also increases the need for this vitamin.[27] Thus, it has been found the total ascorbic acid level of the blood diminishes in typhoid fever. This fact, say Bauerjee and Belavady,[70] might indicate diminished consumption, destruction or increased requirement of the vitamin in typhoid fever.

In discussing the particular dietary needs of the tuberculous patient, Getz[71] reported that vitamin C deficiency was the most striking feature in a group of 500 such patients. In seriously ill cases, the vitamin is destroyed or eliminated. This is an important consideration because ascorbic acid is necessary for amino acid metabolism in general, and tyrosine metabolism in particular.

French investigations[72] suggest another important role for vitamin C in connection with this disease. In work done to determine the effect of the vitamin on cultures of tubercle bacilli, ascorbic acid neutralized with sodium bicarbonate was added to various culture media. Vitamin C was found to have a bactericidal effect on such cultures.

This brings up the fact that some workers look upon vitamin C as a potent chemotherapeutic agent. According to McCormick,[53] when vitamin C is given intravenously or intramuscularly in massive repeated doses, its effect in acute infectious processes compares favorably to that of the sulfonamides or antibiotics, but with the great advantage of complete freedom from toxic or allergic reactions.

McCormick calls attention to an earlier paper[73] in which he reported "spectacular" results from the use of vitamin C as a therapeutic agent in the treatment of tuberculosis, scarlet fever, pelvic infection, septicemia and other conditions. He also cites Klenner's[74] use of massive doses in the treatment of various virus infections, including poliomyelitis, measles, mumps, chicken pox, virus pneumonia and virus encephalitis.

McCormick[73] is of the opinion that ascorbic acid is of definite importance in the prophylaxis of infectious diseases. He feels that the gradual decline in the incidence of infectious diseases during the past century is attributable, to some extent at least, to a steady increase in vitamin C intake during this period.

Ascorbic may be a valuable adjunct to other therapeutic substances. An outstanding example of such use was provided by Lewin and Wassen[75] who simultaneously administered desoxycorticosterone (desoxycorticone) acetate and ascorbic acid to patients with rheumatoid arthritis. In their clinical work, nine patients with both mild and severe rheumatic disease of the joints were given an intramuscular injection of 5 mg. of desoxycorticosterone acetate, followed imme-

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Increasing the Detail Man's Productivity

by Gustave Bardfeld

PRESIDENT, GERIATRIC PHARMACEUTICAL CORP.

Both management and the sales organization are now asking—how can we be more productive? How can we improve our volume in these times of increased competition? Each department believes that it is doing its share, but that the other department is not doing as well as it might.

There is no special formula that one can follow to find out wherein the trouble lies. Each department has to let its hair down and take cognizance of the fact that teamwork, and discussion amongst themselves to obtain this teamwork, is of utmost importance. Harder selling, better leadership and management are absolutely necessary if a company is to keep up with the rapid pace the pharmaceutical industry has set in the past decade.

We must take into consideration that this country's population is increasing very rapidly. The average person also is living longer, insuring greater sales of medicinals. Now the question arises—how can we obtain our share of these sales? Fortune Magazine prophesies that harder selling is the answer. What is meant by "harder selling?" At a round table discussion on this subject the following were agreed upon:

1. Management should spend more time in the field in order to obtain first-hand knowledge of what the customers want; how the customers react to the items now being marketed by the company; what the salesmen are confronted with; how the company's advertising is being received; and how the habits of the customers are changing.

By being well versed on these matters, management will have on its finger-tips first-hand knowledge concerning the company's business, and will be able to learn how to attract and keep employes in the field. The customer—whether he be a physician, pharmacist, wholesaler, hospital administrator, or buyer—forms his opinion of the company from the actions and activities of the company's representatives. In the minds of these people—the *representative* is the company.

2. Advertising should be more to the point, giving the physician the data about therapy as well as the adverse side effects. Do not promise too much for a new contribution to medicine with too little clinical evaluation.

The advertising departments of the pharmaceutical industry have made the greatest strides in advertising in the last decade. Detailing, advertising and convention exhibits work hand in hand in producing greater sales.

Most advertising departments do not see eye to eye with the sales department. Most advertising departments believe that they are responsible for the sales volume. However, one can point to numerous territories which are out-producing others in spite of the same amount of advertising. It is the personal touch of the detail man that hits pay dirt by properly using his company's advertising.

A Must: The advertising department should work closer with the sales department to improve the detail man's productivity in the same proportion that it has improved its advertising productivity.

3. The detail man should be a salesman in the doctor's office, selling the doctor the *will and necessity* to write prescriptions for the products of the detail man's company, rather than being just a sample distributor or a good-will ambassador. A detail man must be enthusiastic, for as we all know, enthusiasm is contagious.

The salesman is finding it harder to obtain the confidence of the doctor because the doctor is annoyed, perplexed, and wary of the company's actions in:

a) Over-enthusiastic publicity in the introduction of a new product.

b) Promising the doctor very effective therapy which

(Continued on page 879)

Problems of Pharmacy

The emphasis in the drug manufacturing industry upon products which are not advertised to the public has continually brought new problems as the production and sale of these pharmaceuticals, or ethical products, has multiplied. The problems of the proprietary branch of the industry have changed very little—such changes being more in the direction of more proper advertising and increased research for the development of improved products.

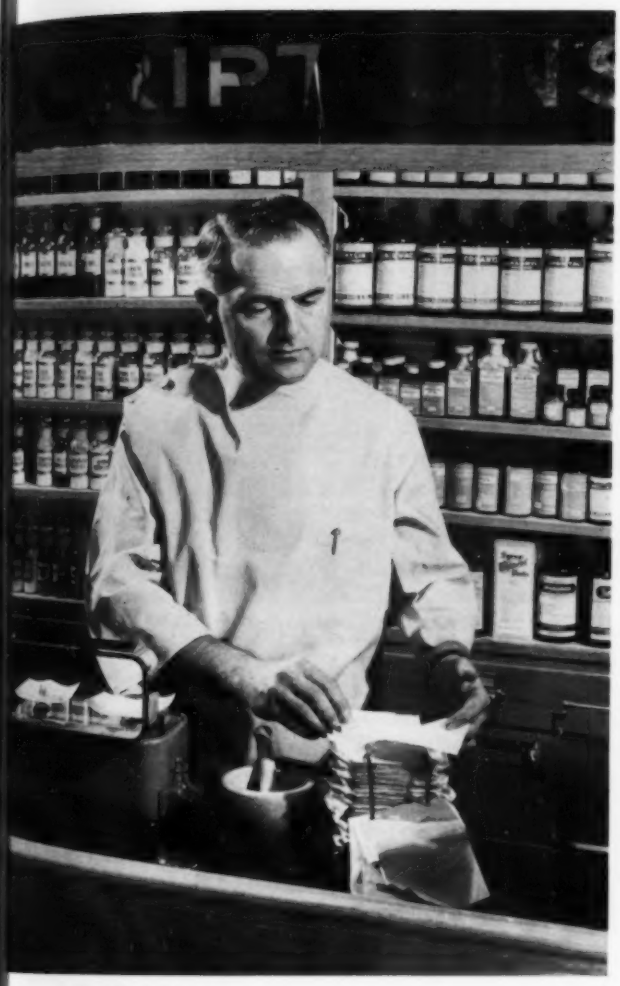
With the rapid growth in the products of the ethical branch of the industry has come a very sharp rise in the number of prescriptions written by doctors. This sharp rise in prescriptions has been very helpful in aiding the pharmacist to maintain his dollar volume and profit during a time when he has been losing a large part of the sale of proprietary drugs and cosmetics to other outlets. Perhaps the greatest inroads on the druggist in this respect have been made by the supermarkets and grocery trade in general.

However, as soon as prescriptions became big and important business to the pharmacist, chiselers were bound to move in. Due to the fact that the enormous research expenditures by pharmaceutical manufacturers, as well as enormous detailing and distributive expenses of these manufacturers were absolutely necessary to educate the medical profession and others to these new products, the prices of these pharmaceuticals were considerably above the actual cost of production. This gave imitators an opportunity to move in with similar products offered to the druggists at sharply lower prices.

Due to the fact that these original products were often duplicated by equally reputable pharmaceutical manufacturing houses, it was the practice of many houses to make their new products in a distinctive form, shape, or color combination so that the product would be easily recognizable to the initiated even though it was dispensed on a prescription with no identifying marks on the container. But this did not stop the imitator who sought to sell his goods to druggists for the express purpose of substituting his product for the original product on a prescription.

This subject has proved to be one of the knottiest problems with which this industry has been faced in many long years. The matter of substitution has many facets. There are druggists who carry several well-known and highly reputable brands of a particular pharmaceutical preparation. They do not feel the need of carrying all the brands available in the market—which in the case of isoniazid totaled something more than thirty. Many of these druggists, when faced with a prescription calling for a brand which they do not carry, will call the doctor on the phone and ask him if one of the others will do. This is not substitution. However, the detail man responsible for the attitude of the doctor in prescribing this particular brand would like to wring the throat of that particular pharmacist.

Many interested in retail pharmacy are of the opinion that duplication by reputable pharmaceutical manufacturers of the products originated by others is, in the



EWING GALLOWAY PHOTO

main, the real cause of the increase in substitution. Prices of many of these duplications are lower than the prices of the original products and leads the pharmacist into the practice of substituting one brand for another. In these particular instances the reputations of all the firms involved is very high. However, the druggist has no way of telling how any of the duplicators stand with regard to the particular product prescribed. Therefore, the pharmacist is wrong when he makes any change at all without consulting the doctor who wrote the prescription.

But when a druggist gets into the habit of substituting one of these so-called duplications for the product prescribed, it is only a short added step to substitution with products made by manufacturers who are engaged almost entirely in the production of imitations of outstanding pharmaceuticals. And these imitations are, for all practical purposes, identical in form, shape and color combination, so that the person getting them, and, in fact, the doctor prescribing them, would have great difficulty in determining that they are not "just what the doctor ordered."

The difficulty in solving this problem is that substitution is practiced by a relatively small percentage of the practicing pharmacists. And in order to bring the practice under control, the cooperation of those interested in the welfare of the retail pharmacist is essential. Furthermore, any attempts at prosecution should be directed at the manufacturers of these imitations, rather than at the pharmacists, if possible. Also any publicity which would tend to undermine the confidence of the public in its corner drug store should be carefully avoided.

Another problem which has recently started to plague the pharmaceutical manufacturer, is the practice of some large price-cutting establishments to cut prices of well-known products which are sold on prescription. It is a well known fact that many of the newer pharmaceuticals are relatively high in price when one compares them with preparations prescribed prior to the present "golden age of therapeutics." In the case of some of these pharmaceuticals, the people buying them remember only the price which they paid for them, and completely forget the great benefits derived from their use.

Some large and well-known price-cutters have advertised these products in the newspapers at cut prices even though they can only be dispensed on a prescription. Then when the manufacturer brings suit against them for selling his product at a cut price on a prescription, the price-cutter hides behind the prescription and declares that he is not selling a branded product—in fact he declares that he is not selling a product that is in competition with any other product.

The price-cutter's arguments have some basis in fact for the reason that a prescription is a single thing. It is the creation of a particular doctor for a particular condition of a particular person at a particular time. However, the doctor in many cases, uses the same product to treat these cases. And the fact that many of the leading manufacturers attempt to identify their products so that they can be recognized even though they are in a container that bears no identifying marks, lends some weight to the argument of the manufacturer that these products can be properly fair-traded.

One might wonder why the manufacturer is so vitally interested in fighting a legal battle to insure maintenance of his fair trade minimum prices on products which are never sold over the counter and only on prescriptions. But one must realize that it is in his interest that the retail pharmacists are prosperous, and that they make a substantial profit on such of his goods as they sell. And if one examines this condition carefully, he will see that there is a real link between a continuance of price-cutting by some on well-known products on prescription, and substitution. For if an ordinary retail pharmacist is unable to make a profit on these products when they are sold on prescriptions, he is going to get an imitation or a lower priced duplication with which to fill these prescriptions. In other words, he is going to protect his competitive position—

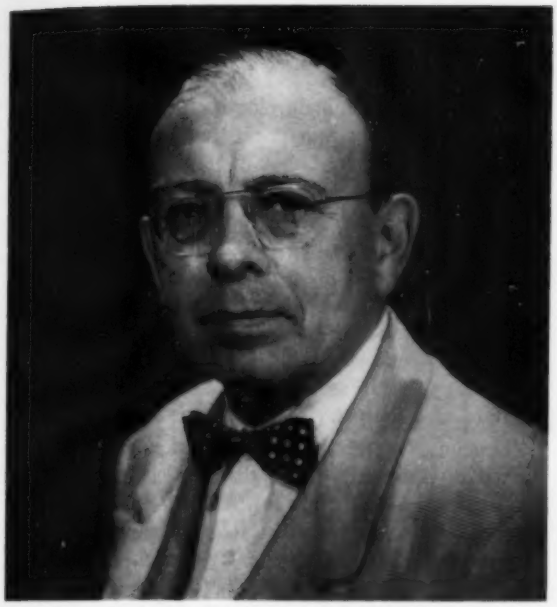
(Continued on page 890)

Proprietary Association Meeting

"Maintenance of fair trade appears increasingly dependent upon litigation," Proprietary Association General Counsel James F. Hoge told the members of that group at the annual meeting held last month. "That is natural and, to a large extent, unavoidable, considering the scope of subject-matter and number of people involved," he continued. "And yet, an optimistic outlook must depend upon an enlarged acceptance of the idea. Always there will be violators of contracts and of the non-signer provision of the laws, but for fair trade to assume permanency as a system of merchandising, there must yet develop a sound foundation of voluntary acceptation by a substantial part of the affected distributors."

"The outlook for fair trade will be shaped by numerous developments, legal and economic," said Mr. Hoge. "Considerations in this latter field are causing concern. Already warnings have been sounded by defenders of the system—warnings addressed to retail druggists themselves—to the friends of fair trade. In the legal arena, the Supreme Court of Florida has declared the new Florida statute unconstitutional as to the non-signer clause. The Michigan Court had done the same thing some time previously. So had the Georgia Court with respect to the former statute there. A new law has been enacted which is yet to go to that Court—a Court which has in the past indicated its unfavorable attitude to the subject generally. The constitutionality of the New York Act is again before the Court of Appeals in that State. And a decision adverse to fair trade is moving toward the Supreme Court of Nebraska."

With regard to state pharmacy laws and restrictive sales of drug products, Mr. Hoge said that "the significant thing now, however, is that the concern has gone beyond the old bounds of interest. Now the super



Stanley I. Clark, Vice-President, Sterling Drug Inc., newly elected president of the Proprietary Association.

markets have discovered an interest in the subject which assumes proportions far greater than those of the comparatively small grocery and general stores of previous years. And intriguingly enough, drug stores themselves are finding an interest quite contrary to their traditional one. More and more, drug stores have expanded their lines of merchandise until today they are general stores in a larger sense than ever were the stores to which the term was originally applied.

"With the expansion have come changes in marketing. Methods of the super market are appearing in drug stores. The idea of self-service has been taken over and, with growing frequency and intensity, drug stores are displaying merchandise for self-service. Employment of non-pharmacist personnel in drug stores may increase. Today in stores such as these, there is neither the desire nor the means to restrict sales of so-called patent or proprietary medicines to registered pharmacists. The exemption, therefore, becomes important to them because it applies to non-registered personnel in drug stores as well as in other stores."

Dr. Frederick J. Cullen, executive vice-president of the Association, spoke of the appointment recently of Dr. Albert H. Holland, Jr. as Medical Director of the Food and Drug Administration. With regard to the plans of Dr. Holland, Dr. Cullen said:

"In the past, it has been the custom of the Medical Division of the Food and Drug Administration to consult physicians—for example, pediatricians when medicines intended for use in treating children were being considered. And also, in certain instances, the National Research Council was consulted. As a result of these conferences, a policy covering the specific subject was adopted by the Administration. There are those who believe that in some instances the policies were biased, whereas, in other instances they demonstrated a lack of knowledge of what is required in good commercial practices. Hence, much confusion.

"In addition to calling on physicians as in the past, Dr. Holland has proposed that doctors who are employed in the research departments of the various manufacturers, and who are qualified to discuss the particular problems under consideration, be asked to sit in on the panel discussions. In this manner, manufacturers' representatives would have an opportunity to express their opinions prior to the adoption of a policy by the Administration.

"It is believed that such a program, if adopted, will greatly benefit the consumer, and the manufacturer will be in a much better position to understand the policies that have been established. Hence, there will be a smoother type of operation."

Speaking on other matters affecting the proprietary medicine industry, Dr. Cullen said:

"While it is realized that advertising and sales promotion are important to your business, they must assume a secondary role when we contemplate the public health responsibility that you—the modern proprietary medicine manufacturers—have accepted.

"The consumer relies and depends upon your preparations for relief from suffering, and this reliance and trust places stringent demands upon your manufacturing competence and integrity in labeling.

"It also means that present research programs must not only be continued, but circumstances demand that such programs actually be increased. New or better products must be offered. If this is done, I believe the future of the drug industry holds great promise.

"I further believe that the future holds great promise for all business and industry, and this is based upon three reasons. The first we will call "technological vigor,"—and this arises out of the fact that American business, generally speaking, is research-minded. The annual outlay for all types of research in the United States is reliably reported to be something over three and one-half *billion* dollars. Two-thirds of it is spent by private industry. This kind of activity is a great stimulator to the economy.

"Extension of research of all kinds means a better standard of living. We cannot allow in our country a diminution of the forces of research—that is, technological vigor—but, rather, it must expand in the years ahead.

"It is stated that the second great force that stimulates business lies in the fact that our Nation is riding a strong upward population curve. Every twelve seconds we have a net gain of one new mouth to feed, and that new mouth may receive some kind of medication. This rate of gain means two and one-half *million* new customers every year for the necessities of life, which is equivalent to adding the entire requirements of a State the size of Washington to our domestic market annually.

"The third factor is our ability and growing skill in getting along with one another. As a people, Americans

are a highly independent lot. We like to lead our own individual lives, with a minimum of interference. However, we have demonstrated time and time again a remarkable capacity for acting together, and under certain circumstances we have—I believe—a considerable instinct for cooperation and teamwork.

"Today, much serious study is being given to this question of cooperation by many groups—including corporations—particularly in their employer-employee relationships. The ability to get along has been the underlying factor in the development of large business organizations.

"In my opinion, there is a great need for more understanding and closer cooperation in the drug industry itself. In the vast over-all picture, we find similar problems that constantly arise in *all* fields of drug manufacturing—regardless of whether the manufacturer is producing a preparation to be sold only on a physician's prescription, or a proprietary product for use in home medication.

"As an example, the various problems that arise with the Food and Drug Administration—also those in the fields of transportation and foreign trade—and with the Alcohol Tax Division of the Treasury Department—are identical, for all practical purposes.

"It seems to me that the executive heads of the three manufacturing groups—these three vital segments of our economy, so intimately related to the health of our Nation—should establish a coordinating committee to meet occasionally and to discuss various mutual problems as they arise. I am confident that such conferences will result in smoother operations in general—with benefits to both the manufacturer and to the consuming public."

Speaking on Our Stake in International Health, and especially about the World Health Organization and some of its programs, Robert C. Coulter, executive officer of the Division of International Health of the U. S. Public Health Service, said:

"In many areas of the world today communist agitators are finding fertile fields among millions of economically depressed people who see no real hope of improving their lot in life and escaping the shackles of desperate poverty. Such people, who can see no prospect of a reasonably long life (the life expectancy in many countries is 30 years or less), or reasonably comfortable existence, are easily impressed by communism's false blandishments. And to many of these people a reasonably comfortable existence means merely avoiding extreme hunger or starvation and some freedom from chronic illness of one sort or another.

"So it becomes easily evident that one of our best weapons against the spread of communist doctrine, and against the absorption of more and more countries of the world behind the Iron Curtain, is to improve the living conditions of the people of the economically underdeveloped countries to the point that hope can replace despair. And one of the most dramatic avenues for accomplishing this is by improving health conditions through better sanitation, the killing of disease-carrying insects and pests, and other control and prevention measures.

"Successful economic development of underdeveloped areas is directly dependent on the good health of the people. It is estimated that at least two-thirds of the population in economically underdeveloped areas chronically suffer from a variety of diseases. Among these are malaria which, by conservative estimate, still attacks 200,000,000 people a year, yaws with some 30,000,000 estimated cases, schistosomiasis which attacks an estimated 100,000,000 people a year, other parasitic infections and other diseases. In many countries such diseases sap the strength and shorten the lives of a majority of the population.

"Let me cite a few examples of what can be accomplished in combating these diseases. Malaria control was undertaken in Ceylon in 1947. By 1951, 206 square miles of previously uninhabitable malarious jungle had been reclaimed, brought under irrigation, and colonized by more than 91,000 landless people.

"In Tarai, India, in areas sprayed consecutively for two years, malaria transmission was stopped, in others it was negligible. The population of the area has already increased by 50 per cent; many new houses of good quality have been built; banks, schools, hospitals, clubs, movie theaters, have come into being, many of them in places where five years ago there was nothing else but jungle; wages for workmen are increasing; the jungle is being converted into agricultural land, the price of land having risen from nothing to 200 to 300 rupees (approximately $40 to $60) per acre; factories such as sugar mills and oil mills have multiplied; new roads have been constructed; a hydroelectric power plant is in operation and electricity is available in many villages. Food production in 1951-52 was three times more than in 1948-49. The key to the development of this whole area has been the control of malaria initiated and guided by a World Health Organization Demonstration Team.

"In northern Thailand it was found that each case of malaria incapacitated its victim an average of seven and a half days. In DDT-sprayed areas with a population of 282,065, there were 50,000 fewer malaria cases the first year of malaria control than during the preceding year. Since about half the population are workers, this means adding 25,000 work weeks or 175,000 man-days available to produce a better living for the people.

"In malarious areas the greatest incidence of the disease coincides closely with the season when the workers must tend their crops in the fields. In many cases the toll of the disease is the incapacitation of so many workers at harvest time that crops rot in the fields and people go hungry. In areas such as those I have just described this is no longer true, crops no longer rot in the fields while starvation threatens, and the population is given a new will to ignore the false promises of communist agents. *(Continued on page 891)*

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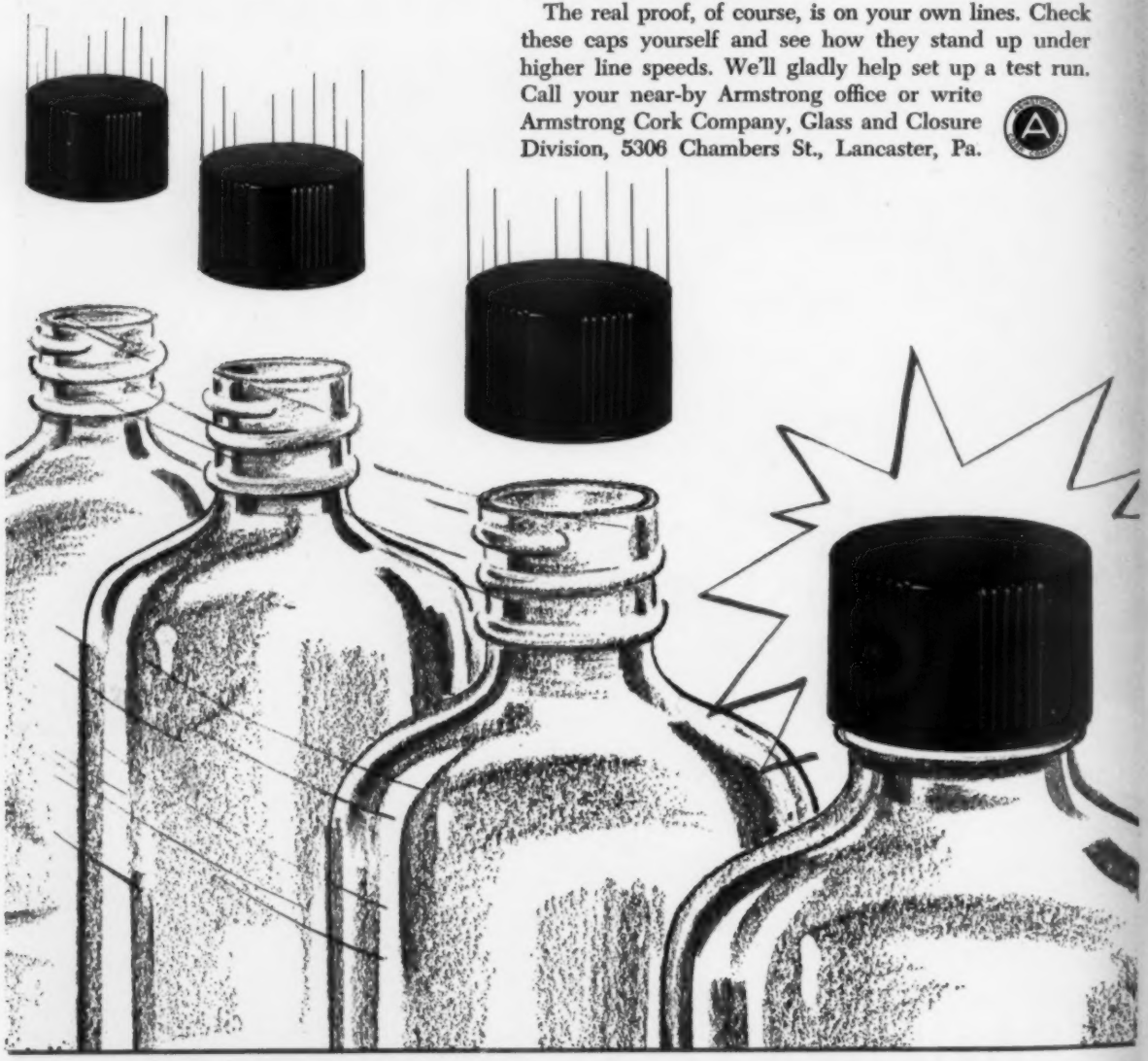

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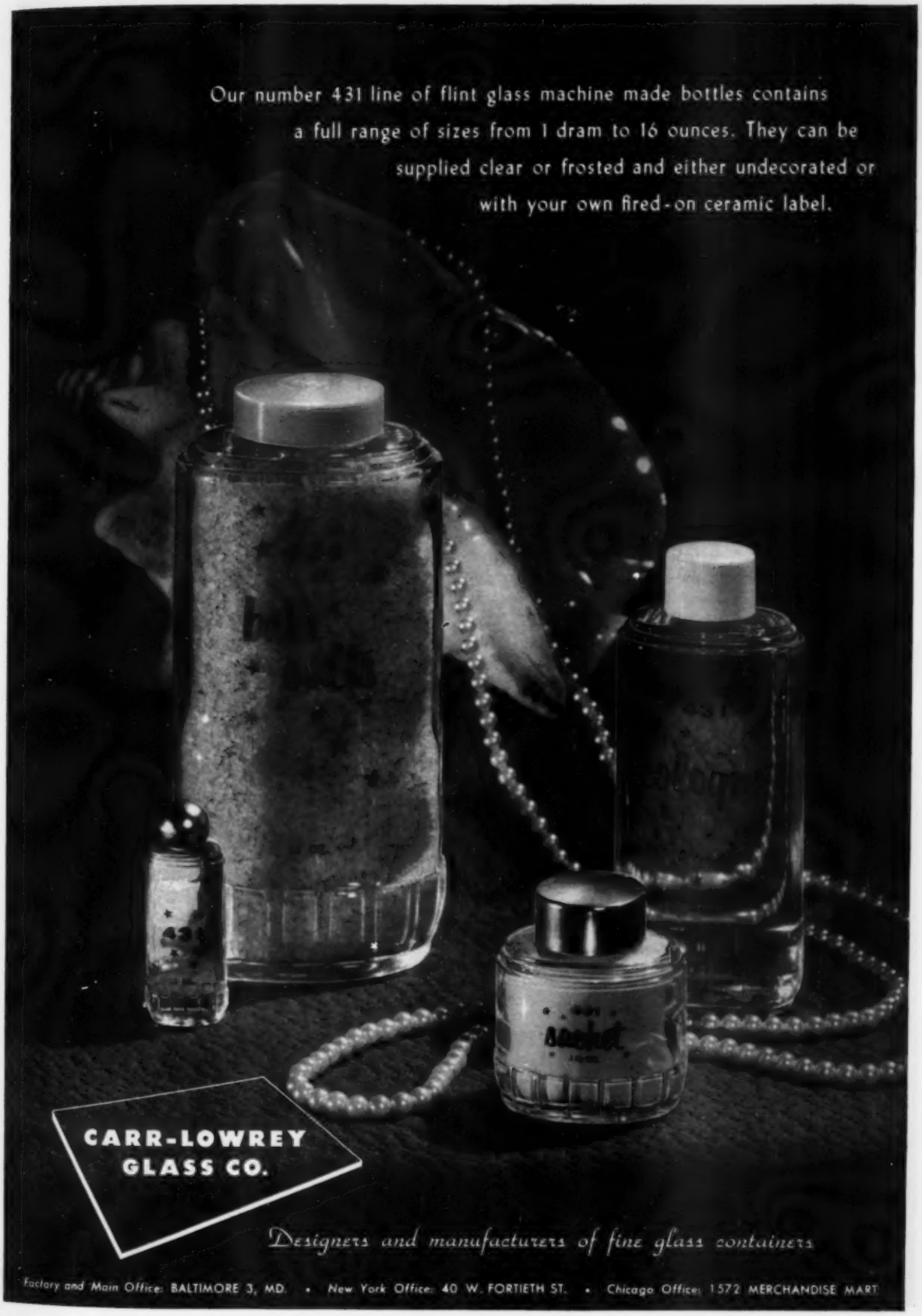
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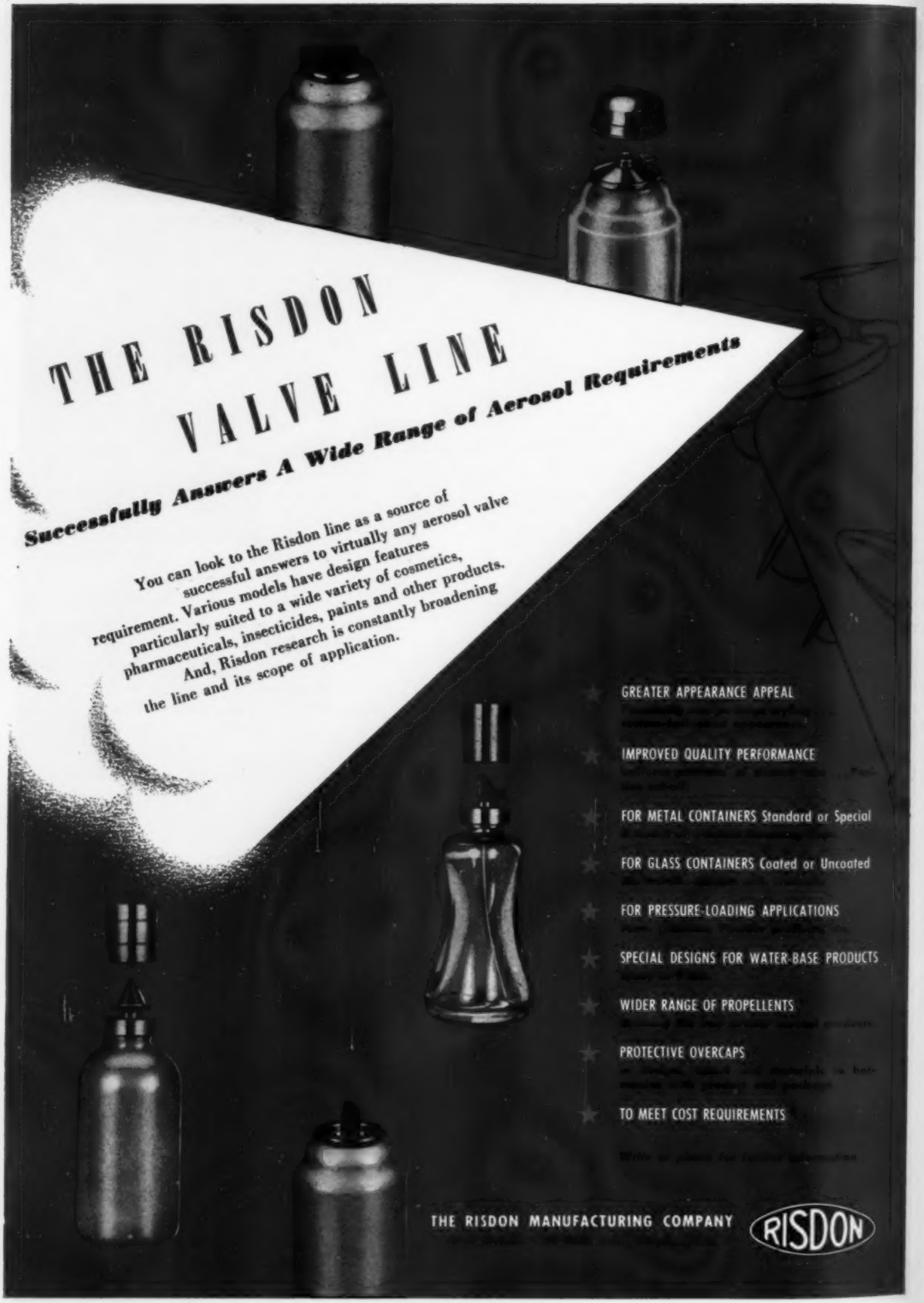
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Aerosols in Glass

by Frank S. Child

The aerosol metal container, so commonplace in the home as a spray for insecticides, deodorants, shaving creams, and a host of other products, now has a companion package—the aerosol glass bottle. Limited to colognes at present, the glass aerosol shows great promise of branching out into perfumes, pharmaceuticals and countless fields hitherto unknown to this method of dispensing.

Numerous details must be ironed out before this new package becomes as well established in the household as its metal cousin. In fact, an important question has yet to be settled concerning the safety of the aerosol bottles themselves, of which there are two types.

The plain glass aerosol bottle is designed for "ultra-low" pressures, ranging up to 15 pounds per square inch, gauge, at room temperature. The plastic-coated aerosol bottle is designed for low-pressure (15-30 psig), in contrast to the aerosol cans which accommodate high pressures above 30 psig.

The ultra-low pressure men say their bottle is perfectly safe for its intended use and its range of pressure. The plastic-coated adherents declare their bottle is safe under both low and ultra-low pressures and should therefore be the accepted container. The big question is whether or not these two aerosol bottles will be able to share the retail market side by side, once the novelty of the new container wears off.

Both bottles are similar in that they have no sharp corners but are rounded at the bottom edges and shoulders in order to increase their strength. They are both the same thickness. Here the similarity ends.

Wheaton Plastics Corp., Millville, N. J., has a patent pending on a process which coats the low-pressure bottle with a thin film of plastic. The plain bottle, made for Zonite Products Corp., New Brunswick, N. J., has no coating of any kind.

Zonite has applied for a process patent which deals with the important relationship between alcohol-base products and propellants. The company has entered into licensing agreements with several contract fillers, including Fluid Chemical Co., Newark, N. J.; Continental Filling, Danville, Ill.; Stalfort Co., Baltimore; and Boyle-Midway Inc., Cranford, N. J.

The chief difficulty with the uncoated bottle, until recently, was the scarcity of du Pont's propellant, "Freon-114," which has an important use in atomic energy work. This scarcity no longer exists.

The du Pont Company ("Kinetic" Chemicals Division) published a *Memo to the Aerosol Industry*, dated May 27, 1954, in which they explained the matter fully.

"Because of the increasing number of stories in public print recently about the temporary shortage of 'Freon-114' (dichlorotetrafluoroethane) and its effect on the aerosol industry, we feel you might be interested in the following background information and statement of our position as a supplier of this propellant.

" 'Freon-114' was first introduced by the du Pont Company as a refrigerant in 1933. In the late 1940's it was found to have desirable applications as a low-pressure propellant in aerosol products. Propellant applications gained impetus late in 1953 with the rapid acceptance of aerosol shave creams and toiletry products and introduction of the glass aerosol container with its requirement of an ultra-low pressure propellant Until that time, however, demand for, and sales of, 'Freon-114' as an aerosol propellant were relatively small.

"The Atomic Energy Commission found a need for dichlorotetrafluoroethane in connection with its research and defense production program. The Commission outlined its projected requirements, investigated potential sources of supply, and awarded a contract to the du Pont Company.

"Design and construction of the type of facilities needed for manufacture of dichlorotetrafluoroethane requires about a year and a half for completion. On March 16, 1954, the du Pont Company completed and placed in operation new manufacturing facilities which, along with additions made to its other facilities, should

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AEROSOLS IN GLASS *(continued)*

be capable of producing enough dichlorotetrafluoroethane to satisfy current Government contracts and the best, realistic estimates of the aerosol industry's requirements. The latter estimated call for quantities about four times greater than those supplied to the aerosol industry in 1953. Its operation is proceeding satisfactorily and is expected to exceed original estimates of production capacity."

This particular Freon is the most stable of the many combinations which have been tested so far; it is also a very low-pressure gas. Other propellants are used in obtaining similar pressures, but at least one of them is known to react frequently with the cologne products. The bottles have been dropped from a four-foot height onto a concrete test floor, requiring an average of 15 consecutive drops before breaking. Very few women, they say, will be using these aerosol bottles in bathrooms or bedrooms having such rigid floors, and most of these rooms will be covered by rugs. Even if the bottles are dropped into a washbowl below a medicine cabinet or cosmetic shelf, the distance will be much less than four feet, and the impact, proportionately diminished.

We witnessed just such a four-foot drop test at Zonite and had to wait until the 15th time before the aerosol bottle broke. We also observed an ordinary soda bottle break on the first drop, as well as a two-ounce and an eight-ounce screw-cap bottle, each filled with water. These, too, broke on the first drop.

Glass from the soda bottle scattered up to 12 feet from the breakage area. Glass from the aerosol bottle was thrown just about the same distance, with a few tiny slivvers going several feet beyond. The water-filled bottles did not scatter so widely. What does this mean?

The aerosol men reply that whenever any one drops a glass bottle, regardless of the type, it is wise to move fast, and get away from the breaking area. "Our bottle," they say, "is just as safe as any other bottle now used in the home, and it doesn't break as easily."

There are two phases—liquid and gas—in an aerosol bottle. The liquid phase consists of the product itself, in which is mixed a small amount of liquid propellant. In the clear space above the liquid is the gaseous phase of propellant. When the valve is depressed, and the product sprayed, the amount of liquid in the bottle obviously decreases. This momentarily reduces the pressure of the invisible gas which has to spread out and fill up a bigger space. Simultaneously some liquid gas is released from solution and turns into vapor so that the original pressure is achieved once more.

The less liquid there is in the bottle, the more gas there is. A bottle containing mostly gas and very little product has more "punch," and this tends to force the pieces of glass a greater distance if breakage occurs. It is the gaseous phase which is waiting to expand when the glass breaks. The propellant in liquid form has no force; it must first become vapor.

The *tendency* for a bottle to break becomes less as its contents are used up, since there is less weight within the container, and the bottle is more resilient and more apt to bounce a little.

But, it should be emphasized, the pressure within the bottle remains unchanged, until the product is used up. Saying this another way, if the bottle contains 15 psig when full, it will contain 15 pounds per square inch, gauge, when almost empty of the product, provided the room temperature remains constant. As the last few drops of the product are expelled, the pressure within the bottle drops considerably.

The plain-glass bottle costs about three cents a piece to manufacture, as compared to the seven and one-half-cent price for the plastic-coated type. Why pay more for a bottle, ask the uncoated users, when this particular container provides all the safety and smart appearance necessary in a cosmetic container? Besides, there is no added weight, no dull finish, because the bottle is pure, shiny glass.

As for shipping, no additional precautions are necessary; these uncoated bottles are packed for transit just like every other glass container.

On questioning a manufacturer who is now selling a number of fragrance products in the plain-glass aerosol bottle, we learned from a representative that the firm is well satisfied with the elegance and safety of the bottle. If the bottles continue to maintain their safety record and consumer appeal, he sees no reason why the firm should consider changing to the plastic-coated bottle.

The plain-glass bottle people are strictly on the defensive, as far as the safety of the container is concerned. Let's consider the plastic-coated aerosol bottle and review the arguments in its favor. One of the most pertinent questions usually asked is, "Why buy an uncoated bottle which provides a risk of shattering glass if the bottle breaks, when the coated bottles do away with all chances of flying glass?"

We recently witnessed a test drop of this type bottle. After it had been purposely broken, the plastic covering

(Continued on page 884)

For precision and versatility—choose
OWENS-ILLINOIS for PLASTICS

For example—
Fitments for metal containers (spouts and caps for aerosol shaving soap)
For example—
Fitments for glass nursery bottles
For example—
Cosmetic containers
For example—
Specialty items—Tire valve and battery caps

Owens-Illinois packaging know-how and high-quality standards offer you the *finest* in molding plastic facilities . . . Injection molding . . . Compression molding . . . A complete range in plastics for packaging, for specialties.

Branch Offices:

Albany.....New York	Columbus.....Ohio	Memphis.....Tennessee	Pittsburgh.....Pennsylvania
Atlanta.....Georgia	Dallas.....Texas	Milwaukee.....Wisconsin	Portland.....Oregon
Baltimore.....Maryland	Denver.....Colorado	Nashville.....Tennessee	Richmond.....Virginia
Birmingham.....Alabama	Detroit.....Michigan	New Orleans.....Louisiana	Rochester.....New York
Boston.....Massachusetts	Fresno.....California	New York.....New York	St. Louis.....Missouri
Buffalo.....New York	Houston.....Texas	Oakland.....California	St. Paul.....Minnesota
Charleston.....West Virginia	Indianapolis.....Indiana	Oklahoma City.....Oklahoma	Salt Lake City.....Utah
Charlotte.....North Carolina	Jacksonville.....Florida	Omaha.....Nebraska	San Francisco.....California
Chicago.....Illinois	Kansas City.....Missouri	Peoria.....Illinois	Seattle.....Washington
Cincinnati.....Ohio	Los Angeles.....California	Philadelphia.....Pennsylvania	Toledo.....Ohio
Cleveland.....Ohio	Louisville.....Kentucky		

PRECISION PLASTICS
AN (O) PRODUCT

OWENS-ILLINOIS
GENERAL OFFICES • TOLEDO 1, OHIO

Packaging and Selling

STORMY WEATHER FOR LIPSTICKS

Lipstick sellers are beginning to hear thunder and lightning on the left and on the right. It looks as if the cosmetic industry's No. 1 specialty, from the viewpoint of universal usage, is in for a very stormy period.

During the last few years, lipstick sellers have had a very serious shaking about by Hazel Bishop. This particular company gave the lipstick people the worst shoving-out-of-the-way that this branch of the industry had seen for many years. In Hazel Bishop the industry encountered an advertising appeal with all the popular interest that made Lady Esther an advertising success, and in addition a factor new to this industry, that is a business setup where it was possible to spend up to 50 per cent of sales in advertising and still conduct the business.

Among the upsets that can be attributed, to quite a large degree to Hazel Bishop, is the changing price pattern in lipsticks. Ten years ago, lipstick sales were pretty well divided in a way that give about 80 per cent of the lipstick units to the 10 cent size and only 20 per cent to prices above that. This meant that the standard dollar lipstick probably did not exceed 15 per cent of the number of lipsticks sold and in addition these dollar lipsticks were confined to a very selected distribution, mostly of department stores, and to some degree the better independent drugstores and the A & B stores of the drug chains.

Hazel Bishop, with its enormous advertising expenditures, exceeding five million dollars annually, has secured universal distribution for a $1.10 lipstick throughout all branches of cosmetic distribution, including department stores, drugstores and chains, variety stores and a considerable number of grocery super-markets. It is a great tribute to the volume of their advertising and the potency of the advertising claim that the Hazel Bishop lipstick has been enabled to maintain a position in each branch of cosmetic distribution and to maintain a department store position while at the same time it was rolling up a heavy sales volume in such places as variety stores and grocery stores.

During these last ten years, the ten cent lipstick has practically disappeared from the scene leaving a conglomeration of prices of which 15c, 29c, 59c and $1.10 are the outstanding price lines. In between there is some sales volume at 39c and 49c.

The remarkable thing in the pricing of lipsticks however, is the fact that the $1.10 lipstick has gained enormously in sales volume at the expense of the lower prices, so that today the variety stores are selling a substantial number of lipsticks at $1.10 and have practically given up their position in the psychological price range of 10c to 15c.

This change in the consumer attitude toward the price of a lipstick has not received the attention that it should from the industry. As one prominent industry member remarked in this connection, "The people in the lipstick business who have had an inferiority complex toward the price the consumer will pay for their lipstick are the ones who have been badly losing out in this recent market era."

The leaders in the lipstick industry such as Revlon, Max Factor, Hazel Bishop, Coty, Rubinstein, Hudnut, Gray, Tangee, Colgate and Pond's are girding their loins for what promises to be the toughest retail fight since they were in the lipstick business. This is because one of the toughest competitors that this industry has ever seen is at the point of shouldering its way into the lipstick business.

When we use the word "shouldering its way" into the lipstick business in regard to the new lipstick which Toni is about to introduce, we use that word with what we believe is a pretty fair understanding of this market.

As we said above, the lipstick is the cosmetic industry's No. 1 product from the viewpoint of universal use. According to Toni's own figures, over 90 per cent of women 16 and over wear lipstick and 95 per cent between 16 and 45 years of age are lipstick users. An average of 55 per cent of the lipstick users buy between two and four lipsticks a year. The current lipstick market is currently 70 million dollars at retail. These figures of Toni in regard to the number of women using lipsticks are borne out by hundreds of surveys made by magazines, newspapers, farm magazines, radio stations and others. It is rare that a survey shows less than 90 per cent usage.

As regards the frequency of use, that is between two to four lipsticks a year, this is so variable a factor depending upon income, social status, social environment and other factors that it is a pretty wild guesswork in establishing a figure. Nevertheless, as a market guess, Toni's figure is probably pretty accurate.

As to the 70 million dollar volume of lipsticks at retail prices, quoted by Toni, we believe that this is quite a bit off the line and substantially larger than the true market. We have noticed many times before that when a company estimates a market for a specialty product they almost always err heavily on the favorable side. We don't think that out of a possible 490 million dollars of cosmetic retail sales that lipsticks occupy this proportionally heavy dollar share. If we say there are 48 million women who use lipstick and that these women use an average of two a year, we have 96 million lipsticks sold a year. This is a thoroughly good optimistic estimate. If again we say that the average price of lipstick is 50 cents we get a retail volume of 48 million dollars for lipsticks. We are willing to bet any of the Toni market experts a good dinner that the retail volume for lipsticks is under 50 million dollars.

Based upon these estimates above, we do not see a great deal of room for the addition of new users to the lipstick market, or giving women any social reason for using lipsticks more frequently. We do not by any means put forward the idea that lipstick sellers have reached the saturation point because there is still quite a lot to be done in encouraging greater frequency of use. At the same time, we don't believe that sales of lipsticks during 1955 will show more than a five per cent increase over sales of 1954. That means that Toni, now scheduling five million dollars advertising in a campaign that will plaster magazines and newspapers, radio and television, is using 95 per cent of that five million dollars to push somebody else's lipstick into oblivion.

As an excuse for invading this particular cosmetic field, which offers so little possibilities for a broadening market, and in which practically every cosmetic company has an established competing product, Toni, in addition to five million dollars to spend in a hurry, believe they have something somewhat new in a lipstick.

On the basis of their own nationwide market surveys, Toni finds that the qualities of lipstick desired by women are in the following order of importance: color 83 per cent; lasting quality, 56 per cent; ease of application 34 per cent; taste, 10 per cent and perfume six per cent. These interests hold true, according to Toni, for all age groups and for regular and indelible users, alike.

Women under 35, generally considered the most fashion conscious, are even more interested in color than those over 35. So whatever else women want when they buy lipstick they want color first and foremost.

Also according to Toni, most beauty experts, retailers and consumers agree that six shades can provide a full color range. Ninety-three per cent of lipstick users chose from six basic shades, they say.

Toni found that texture, that is the feel of the lipstick, is an important factor. The Viv formula offers a lipstick with as much indelibility and non-smear quality as the good indelibles; plus the advantage in comfort and protection of a creamy lipstick.

Toni expects national distribution to be completed by August 15th.

Sometimes watching the phenomena of the introduction of a new packaged product by one of the giants in industry, we get the feeling of an ominous precision machine that must overwhelm everything that gets in its way. It is the same kind of feeling that we had when we read about the preparation under General Eisenhower for the Normandy invasion. This coordination of massive advertising power synchronized with every phase of merchandising at the point of sale is a weapon which big business has brought into this industry only in the last few years. Just recently, one of the top manufacturers of this industry, in their annual statement, said to the stockholders that it required five million dollars in advertising today to introduce a new product. Particularly in the tooth paste business and in some branches of proprietary medicine, overwhelming weight has been brought to bear for the introduction of some products and almost always has resulted in the partial displacement of some previously established products.

But alas, looking back at these many million dollar introductions, anyone is forced to the reluctant conclusion that many of these products had no right to exist in the first place, because they did not contribute anything new that was of value, and that the inspiration behind the introduction of many of these products was simply a will to make use of superior economic means.

The new Toni lipstick, which is seeking universal distribution in chain and independent drugstores, department stores and syndicated variety stores is priced at $1.10. This undoubtedly means a further development in the increase in the price line of the lipstick. It is interesting to note in this connection the trade rumor that the Toni lipstick was first introduced in test areas at 79c. In some of these test areas the company offered the same over-powering inducements to a chain store which gained preferential treatment in the early days of the home permanent wave introduction. In the case of the 79c lipstick however, we understand that these somewhat extravagant inducements were rejected because the store management felt that they could sell a lipstick today at $1.10 and were basically opposed to a narrowing of their profit margin for price line of lipsticks in their store.

Charge It

According to A. J. Wood & Co., market research, a charge customer is worth a lot more than a cash customer. Mr. Wood writes: "Charge customers prefer a store, its specific departments and its merchandise and services up to five times as much as do cash shoppers of the same store."

Here's Hoping

An atom bomb specialist states that the Armed Forces Institute of Pathology is going in the pill business. They are trying to develop a pill which can be used to

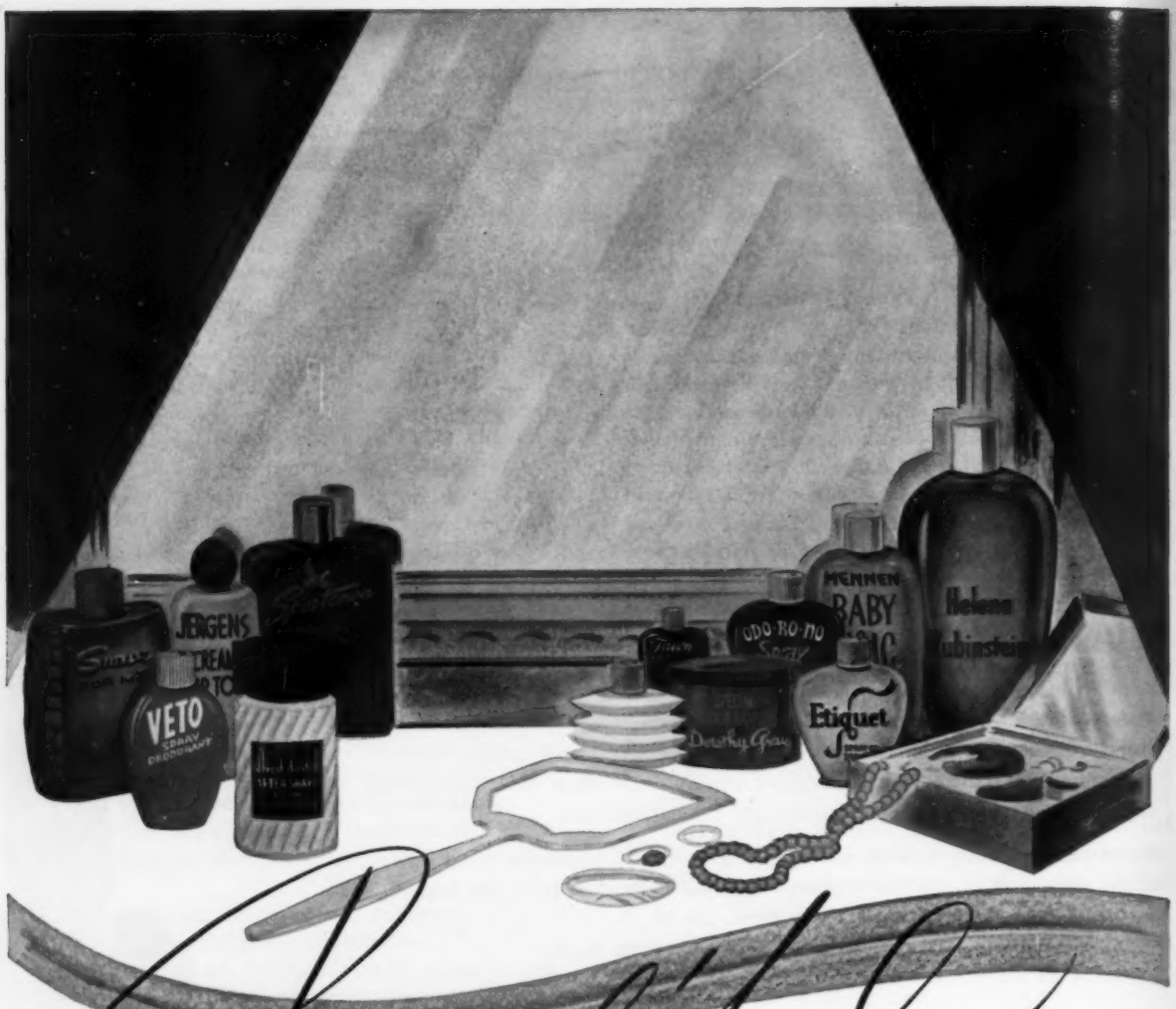
To Market... In Peerless Tubes

To market . . . millions of Peerless tubes annually, packaging America's finest cosmetic, toiletry, pharmaceutical and household products.

Manufacturers using Peerless tubes for their products spend millions each year to advertise their respective brand names. The public buys them with confidence, knowing that when they unscrew the caps the contents will be pure, fresh and uncontaminated.

Never compromising a single whit on quality, always conscious of the obligation to guard a product's reputation, Peerless tubes are known by manufacturers everywhere. They, every one of them, will tell you there are no finer collapsible tubes made anywhere in the world.

PEERLESS TUBE COMPANY
Bloomfield, New Jersey



Beautiful

yet so practical

They'll never break. They'll never shatter. They'll never rust. Not when the container is plastic—molded by IMCO. They're all so light—so handy to use—and so beautiful.

Mrs. Consumer knows all this. And she'll buy more of your product when it's in an IMCO plastic container.

IMCO CONTAINER CORPORATION

Empire State Building, Rm. 6905
350 Fifth Ave., New York, N. Y.

75th and Cleveland Streets
Kansas City 30, Missouri

Send Another CARE Package Overseas Today

protect Americans from the harmful effects of atomic radiation.

This is certainly modern research. While these scientists are at this research, they might just as well include a parallel project to discover a pill which will protect us from a recession.

Prestige and the Masses

Some people in this industry have frequently compared the way in which Cadillac is merchandised to the way in which a successful perfume is handled in advertising and in selling. In each case, there was the same effect of low-pressure selling, consumer buildup of prestige, the same atmosphere of leadership and the same effort to create the psychology of scarcity.

There seems to be one difference, however. Cadillac placed 72 per cent of its ad budget in newspapers. This means using a mass medium for a product whose average cost is over $5,000. The answer is that Cadillac believes that prestige can be only obtained through the people—all the people. This theory is based upon a statement of Henry F. Leland, the founder of Cadillac: "Everybody wants the best. Let's make sure everybody knows what is the best. Let's advertise our car where the most people can see it."

Lusty Poly

Packaging's lusty babe is undoubtedly the plastic, polyethylene.

Production last year amounted to 140 million pounds and by 1955 is expected to be operating at the rate of half a billion pounds annually. Approximately one-third of this roduction is now being used for packaging. The two producers at this time, Bakelite and du Pont, are working on expanding facilities and new companies are forging into production including Koppers, Monsanto, National Distillers and Tennessee Eastman.

Polyethylene's popularity is based not only upon its great flexibility but also on its versatility as a packaging material. This plastic is transparent, light-weight, abrasion-resistant, waterproof and impervious to nearly all corrosive agents and acids. It is also odorless, tasteless and completely non-toxic. It can be extruded or moulded or easily combined with other materials for any particular packaging requirements. According to R. C. Evans, Director of Marketing of Monsanto's Plastic Division, plastic packages now exceed 300 million a year.

Since the introduction of the "squeeze bottle" by the Plax Corporation, most of the squeeze bottles used by our industry have been for cosmetics. The field of use for this bottle has grown and it appears to hold great promise in a number of pharmaceutical uses. As an example of the growing application of this container, we understand that a polyethylene bottle equipped with a hypodermic needle can be used as a self-contained inoculation unit for chickens.

The squeezable plastic bottle is benefiting from the kind of research that has worked miracles in this country.

Now General Electric Laboratories have come up with a new chemical discovery that promises to expand the use of the polyethylene bottle by making it a much tougher and resistant container. G. E. has discovered that through irradiation, that is, by bombarding the plastic material with high-energy electrons, all sorts of valuable new results are obtained. For instance, the irradiated polyethylene can be stretched as much as 450 per cent without breaking. When the tension is relieved, the plastic will return to its original shape.

Inexpensive Gift Package

John Hudson Moore is introducing an interesting new slant in packaging. This is a novel gift-cover to be used for Fathers' Day packaging and, with variations to be available for future gift occasions.

This gift cover comes in two sizes for the standard Sportsman four and eight ounce bottle in shaving lotion and cologne.

The cover, which consists of one sheet in carton paper with two tuck-ins, is done in a handsomely lacquered Hunters green, gold and white. It fits over the regular package and takes the place of a Fathers' Day greeting card. The message on it reads: "To Dad, The Best Sport I Know." The inspiration of this gift cover is the greeting card. It provides an inexpensive way of converting the standard package, at the point of sale, into a temporary gift package.

What, Flavor!

Most people select a dentifrice for its taste, according to a recent statement of the American Dental Association.

We are under the impression that quite a big hunk of dollars have been spent by tooth paste manufacturers in the last ten years talking about everything else except flavor.

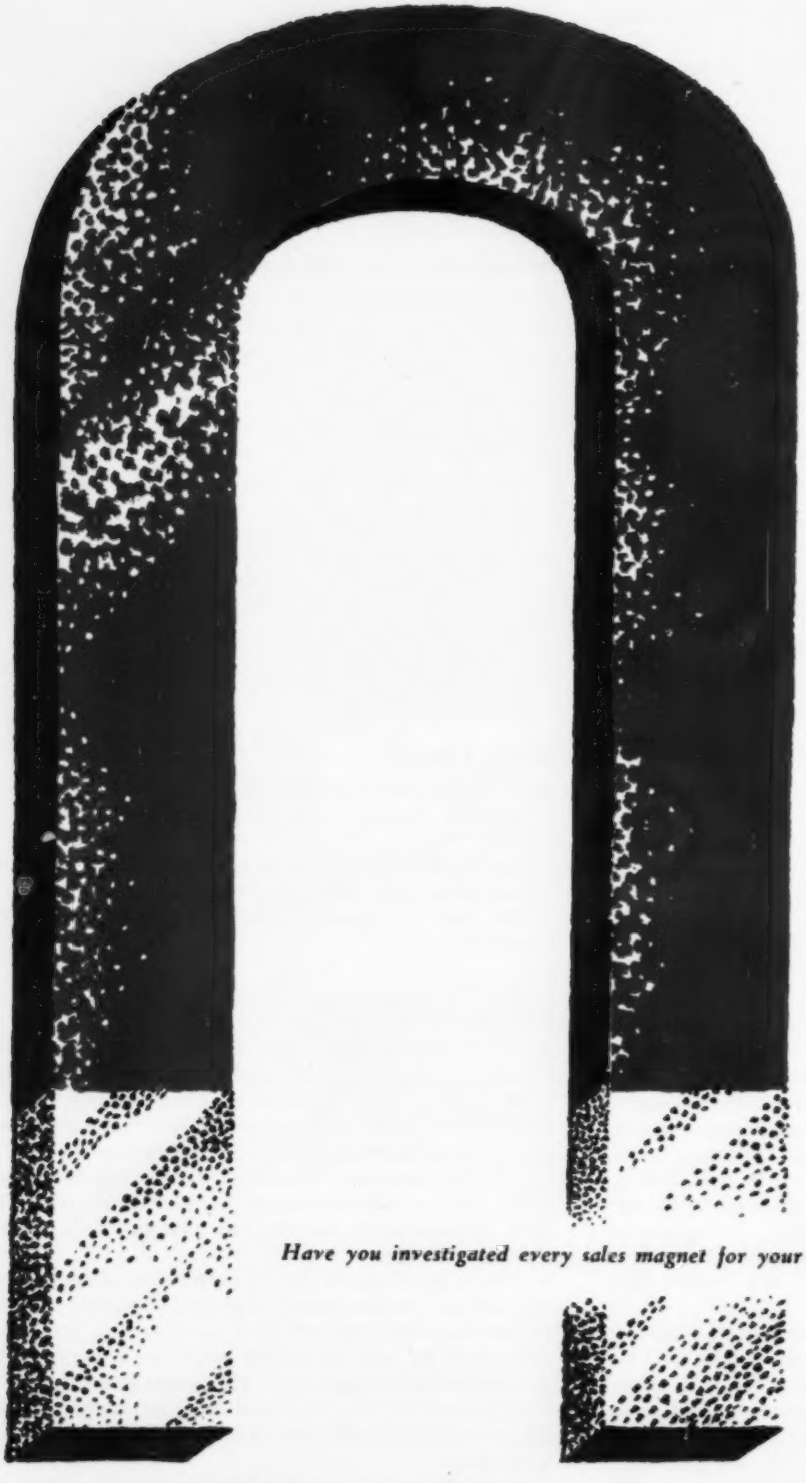
Not That Big

A recent report states that the sales of drugs and toiletries in food stores will total over 510 million dollars in 1954. This report was made by The PROGRESSIVE GROCER, a fine trade magazine with a reputation for execllent marketing research. However, we can't help feeling that there must be a sort of a tongue-in-the-cheek catch to this announced figure. Maybe that's all right because after all we trade magazines have to peddle our space.

We don't know just what the proportions of drugs and toiletries are on the racks and shelves of grocery stores. In our own opinion and from observation, products that could be properly called drugs are a very small percentage of the toiletries. We would guess that the most optimistic estimate would place the proportion at 20 per cent drug products and 80 per cent cosmetics and toiletries.

This would make a reported toiletries sales figure of about 400 million dollars in grocery stores.

Of course, as everybody knows who looks at the excise tax collections for cosmetics, the total annual sale of these products runs something less than 500 million. If these products in the grocery stores were all taxable, that would leave practically nothing for house to house selling, department stores, independent drugstores and



Have you investigated every sales magnet for your product? What about Sun Tubes?

Sun Tube
CORPORATION

SUN TUBE CORPORATION, HILLSIDE, NEW JERSEY, Waverly 3-0400

St. Louis 1, Missouri: Marvin Yates Co., Arcade Building
Cincinnati 8, Ohio: Ralph H. Asch, 3449 Custer Road
New Orleans 19, Louisiana: R. P. Anderson Co., 925 N. Solomon Pl.
Houston 19, Texas: R. P. Anderson Co., 5643 Overbrook Lane
Dallas 2, Texas: R. P. Anderson Co., 1122 Texas Bank Building
West Coast: Wm. J. Stoepler, 301 E. Colorado, Arcadia, California
Canada: Sun Tube Corp., 145 Spruce Street, Ottawa, Ontario
Mexico: Tubos de Estano, S. A. de C. V., 174 Oriente No. 247, Colonia Moctezuma, Mexico, D. F.

drug chains, variety stores, general stores, beauty parlors, barber shops, vending machines and a few other miscellaneous retail outlets. Taxable cosmetics, however, would not be quite fair so perhaps we should add such things as tooth paste, and shaving cream which certainly do well in the grocery store. The figure would then become one billion dollars, the total estimated by the Toilet Goods Association and the magazine BEAUTY FASHION, after stretching the statistics like a rubber band as far as it would go. This most optimistic figure would mean the grocery stores are now getting one half of the business at retail in cosmetics and toilet preparations. Since these are all moderate, low-priced products it would mean, according to the Progressive Grocer, that the grocery store is not only doing one-half of the dollar volume but well over half of the unit package sales of the entire industry.

P. O. P.

The Point of Purchase Advertising Institute has just completed its annual exhibit and convention and as usual a wealth of valuable material and ideas developed during this convention.

According to Mr. Norton B. Jackson, executive Director of the Institute, about one billion dollars will be spent this year for point-of-purchase advertising. In a recent survey of the magazine Sales Management, here's how the different industries will budget point of purchase expenses as part of their entire advertising budget.

Food & Food Beverages	10.7 per cent
Liquor and Wine	19.0 " "
Soft Drinks and Beer	25.0 " "
Drugs & Cosmetics	7.0 " "
Men's Wear	33.0 " "
Electrical Appliances	10.0 " "

In a survey by Printers Ink recently released, manufacturers questioned stated that 13.6 per cent of a total annual advertising budget of $153,440,000 is spent on point-of-purchase advertising.

P. O. P. has shown only too conclusively the ability of the retailer to make or break any brand regardless of the amount of money placed behind that brand. During the last few years, when point of purchase has been coming into its own in general recognition, we have seen a growing awareness on the part of the large national advertisers of the fact that extensive consumer advertising cannot operate effectively, regardless of the brilliance of the copy or the choice of media or the amount spent, unless a favorable display position is secured at the point of sale. During this time, we have seen the discovery of the great influence of impulse buying. We have also seen what might be called the degeneration of the words used to describe the accomplishment of consumer advertising from "consumer demand" to "consumer preference" to "consumer acceptance" and now we get down to a word which is new to us but which was recently used by a leading retailer in an article in Printers Ink that is "preinformed."

There are very few manufacturers of leading nationally advertised brands sold over the retail counter who do not know that the slightest, most insignificant advantage in favor of anyone of several competitors at the point of sale, that the customer will not switch without a qualm to this more convenient product. Not only will the consumer not walk a mile for a branded product today but she will not go twelve inches out of her convenient course of motion to favor any one of several brands in any category. It is our hunch that P. O. P. is going to increase to an even more strong force in marketing than it is today.

Soaring Premiums

The premium people believe that at least one and one-third billion dollars will be spent on premiums and salesmen in 1954. These folks think that the consumer will more and more demand some "extra" for his dollar this year.

Loose Talk

Here are two quotes which appeared within a few hours of each other and which seem to have some relation to each other.

In an address calling for a "reappraisal of the tobacco industry" because of "loose talk", Joseph Kolodny, Managing Director of the National Association of Tobacco Distributors, stated that "cigarette consumption had increased almost ten times since 1920 and that during the same period the life expectancy of the average American at birth has jumped from 54.1 years to 68.6 years." Mr. Kolodny apparently thinks this is conclusive evidence that cigarettes cannot in any possible way affect human health. At about the same time, Dr. Selman A. Waksman, Chairman of the Microbiology Department at Rutgers University in a recent address, declared that the success which medical science has had with streptomycin, terramycin, aureomycin, penicillin and other antibiotic drugs has resulted "in incredibly greater survival of the younger age groups and in prolongation of the average life span of man for nearly twenty years."

No Music?

If the average cost of hiring a successful salesman today is $5,429.00, as Dr. Jesse Nierenberg of Trade Ways, Inc., says, then maybe we are headed for relief from this heavy investment, according to another expert in selling, Max *V.* Buck, Director of Merchandising for NBC and owner of radio and television stations.

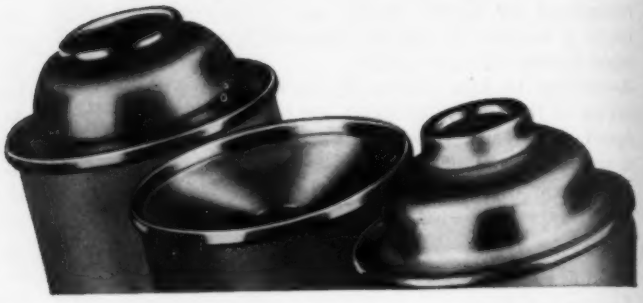
According to Mr. Buck, electronics will soon be doing all the selling in the future. All a manufacturer will need is just one master salesman who will spend his time before a camera in the big home office talking to buyers all over the United States by television. Said Mr. Buck "In full rich color the new product will be submitted for consideration to buyers everywhere, at once. The electronic salesman will show the package, open it, point out its packaging advantages, pour out the product, show it and demonstrate it. Trained home economists will give tips on its use and merchandise men will give advise on how to sell it faster and most profitably. And specialists will show retailers how to tie in on their own advertising."

Our only comment to this is: "What, no music?"

Not one . . . . . .

or two . . . . . .

but THREE



A Continental aerosol can is tailor-made for you!

If yours is a sprayable product in the non-food field, you'll find that one of these *three styles of aerosol cans* could have been designed especially for you. As part of Continental's Tailor-Made Package Service, we'll deliver all of these cans you can use, any time you want them. Individualized engineering and fine lithography are available, and — if you wish — contacts with valve suppliers and commercial fillers. Why not give us a chance to work with you—not just as suppliers, but as interested counselors and friends.

DOME TOP — Domes attached and equipped with standard 1" curled opening for all popular valves. Regular (12 oz.) or Midget (6 oz.).

CONCAVE TOP — Tops furnished loose and perforated with hole-punch for specified aerosol valves. Regular (12 oz.) or Midget (6 oz.).

DOME TOP—Domes furnished loose and perforated with hole-punch for specified aerosol valves. Regular (12 oz.) or Midget (6 oz.).

CONTINENTAL CAN COMPANY

Continental Can Building • 100 East 42nd Street, New York 17, N.Y.

EASTERN DIV.: 100 E. 42nd ST., NEW YORK 17 • CENTRAL DIV.: 135 SO. LA SALLE ST., CHICAGO 3 • PACIFIC DIV.: RUSS BUILDING, SAN FRANCISCO 4

Package Doin's

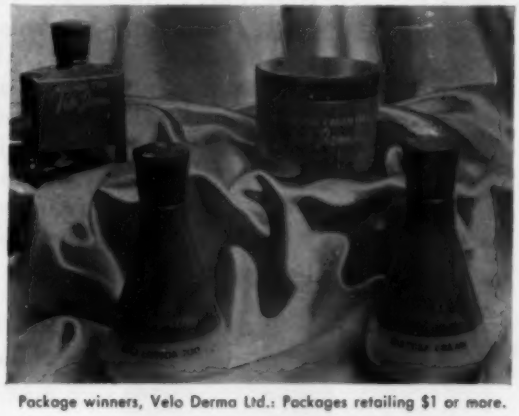
Charles S. Welch Awards

Velo Derma Ltd., subsidiary of Charles of the Ritz, and the Mennen Company each received the Charles S. Welch Memorial Award from the Toilet Goods Association "for outstanding packaging for the year 1953." The presentations were made by former T.G.A. President Joseph Keho, chairman of the awards committee and president of Dorothy Gray, at the Association's annual luncheon on May 11, Hotel Waldorf-Astoria, New York.

In the opinion of the panel of judges, the classically-designed gray and white Velo Derma packages embody the outstanding cosmetic packaging achievement in the high-price merchandise class. The flacons and jars were produced under the directorship of Ethel Franklin, packaging director.

The prize-winning Mennen packages feature simplicity and maximum impact for self-service reselling. They were designed by Francis E. Blod of Design Associates Ltd.

Joseph Keho, left, presenting Welch Memorial Award to Richard Solomon, president of Charles of the Ritz.



Package winners, Velo Derma Ltd.: Packages retailing $1 or more.

Mr. Keho presenting Welch Award to William G. Mennen, president, the Mennen Co.

Package winners, the Mennen Co.: Packages retailing $1 or less.

Coated Tooth Brush

Disposable Tooth Brush, Inc., Buffalo, N. Y., has come up with a dentifrice-coated tooth brush that can be thrown away after use when one is traveling. Similar to the conventional tooth brushes, each nylon bristle is individually coated with a pleasant cleansing agent.

The brush was developed in collaboration with E. I. du Pont de Nemours & Co., supplier of the handles and bristles, and the Arner Co., which is coating and packaging the brushes in heat-sealed airtight containers.

New Package Design for Halo

Colgate-Palmolive Co. is packaging Halo Shampoo in a new family of sparkling Foiline cartons made by Robert Gair Co. The carton is printed in blue, white and gold on shiny silver Gair-Reynolds Foiline. Effect of the carton is to give the impression of cleanliness and freshness secured by use of the shampoo.

Zonite Package Modernized

Zonite Products Corp. has modernized the package of Zonite Ointment and re-named the product Zonite Antiseptic Cream. The new carton and tube have been completely restyled in an eye-catching package designed for good visibility and quick identification.

2 Big Benefits for Your Package

with CEL-O-SEAL

REG. U.S. PAT. OFF.

"Over the past 5 years the increasing popularity of Sno-Bol Bowl Cleaner has forced wider and wider distribution until now it's almost nation-wide. Part of the answer behind these expanding sales, we feel, is our sales-appealing Sno-Bol package with its snowy Du Pont 'CEL-O-SEAL' neckband. And functionally, 'CEL-O-SEAL' bands insure that the Sno-Bol cap remains in place from factory to retailer.

"Needless to say, we're highly pleased that 'CEL-O-SEAL' is giving our package those two big advantages . . . and doing it economically, too."

Says **Mr. Thomas O. Render**
President
M&R Manufacturing Company

Eye-catching Du Pont "Cel-O-Seal" bands will work for your product, too! In addition to holding closures tight, they guard against tampering and spillage, inspire consumer confidence. And "Cel-O-Seal" bands are available in a wide range of colors . . . can be printed with your sales message or slogan.

Free packaging service: See what "Cel-O-Seal" can do for your package. Send us a labeled dummy bottle. Our package experts will band it, return it for your inspection. No obligation, of course. Write: E. I. du Pont de Nemours & Co. (Inc.), "Cel-O-Seal" Section, 9529-1 Nemours Building, Wilmington 98, Delaware.

"Cel-O-Seal" cellulose bands are also sold by Armstrong Cork Co., Lancaster, Pa., and on the West Coast by I. F. Schnier Co., San Francisco, California.

DU PONT
REG. U.S. PAT. OFF.

BETTER THINGS FOR BETTER LIVING . . . *THROUGH CHEMISTRY*

DU PONT CEL-O-SEAL BANDS

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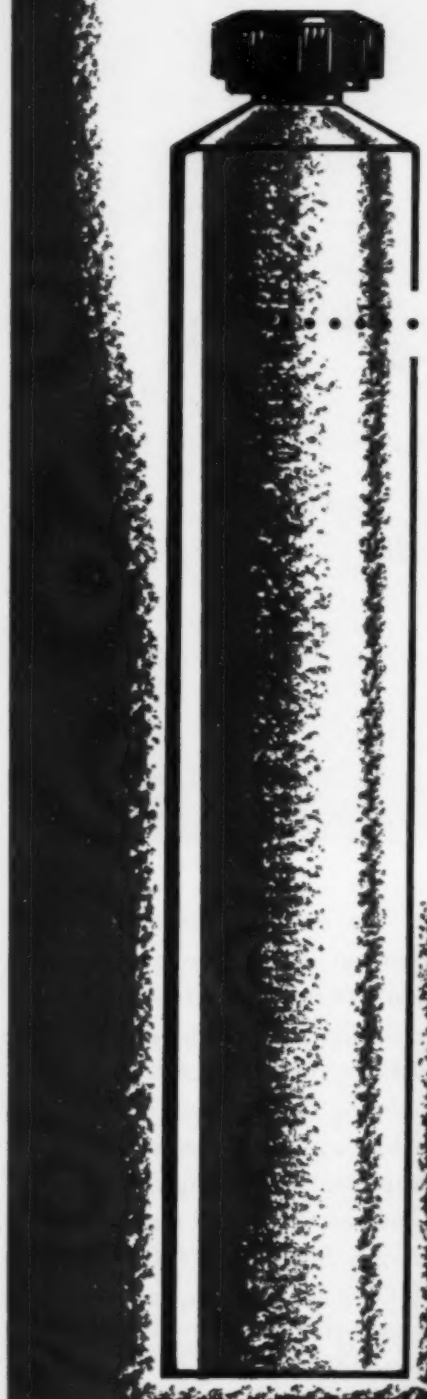

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for creams, toothpastes,
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Mothers everywhere protect their babies' soft, smooth, tender skin with Comfortine Baby Ointment. This external application is prepared for use in minor dermatitis and for protection against chafing, chapping, windburn, poison ivy dermatitis and sunburn.*

Crown Screw Caps are used as closures on Comfortine Baby Ointment. These caps have the well-known Deep Hook Thread and scientifically selected liners. In addition to their dependable sealing qualities, Crown Screw Caps provide trouble-free application on the production line . . . easy opening and tight re-sealing. Before ordering closures again for your products, find out about the advantages of ordering from CROWN.

Crown Cork & Seal Company, Inc.
Baltimore 3, Maryland.
World's Largest Maker of Metal Closures.

Comfortine Baby Ointment is packaged in one-pound jars, 100-Gram jars and 25-Gram jars by William H. Rorer, Inc., Pharmaceutical Chemists, Philadelphia, Pa.

CROWN CLOSURES

Approved by millions of housewives

Patent Thoughts and Trends

*by Thomas Cifelli, Jr.** PATENT ATTORNEY

Recent events indicate that the usually placid drug field is faced with a multi-million-dollar suit involving procaine penicillin, and Eastman Kodak has succeeded in obtaining several patents covering its Vitamin A synthesis.

A discussion of each of the subjects follows.

Penicillin Litigation

It appears that a big court battle is shaping up between Physiological Chemicals Company and Eli Lilly & Co. The former received patent No. 2676961 on April 27, 1954, for procaine penicillin, the inventor being a New York physician, Dr. S. L. Ruskin. Lilly in 1950 received patent No. 2515898, entitled "procaine penicillin and therapeutic compositions," based on the invention of H. W. Rhodehamel, Jr. Dr. Ruskin's assignee filed suit in the Federal District Court in New York City and Indianapolis against Lilly on the very day that U. S. 2676961 was issued. Unfair competition is the basis of the New York action and patent infringement is the basis of the Indianapolis suit, which also requests that the Lilly patent be declared invalid.

To make matters more interesting, Lilly filed its own suit in New York asking for a declaratory judgment invalidating the Ruskin patent on the day that the latter was issued.

In view of the long history of controversy in the Patent Office prior to the issuance of Dr. Ruskin's patent, it appears that the chances of a negotiated amicable settlement do not now look very bright. In this connection, *The New York Times*, from which the information herein given was obtained, notes that Ruskin was involved in an Interference with several inventors, including assignors to Merck, Charles Pfizer, and Lilly.

The Times release also points out that the Federal District Court in Indianapolis upheld the validity of Rhodehamel patent in a decision filed a year ago. However, no such decision appears to have been published as yet.

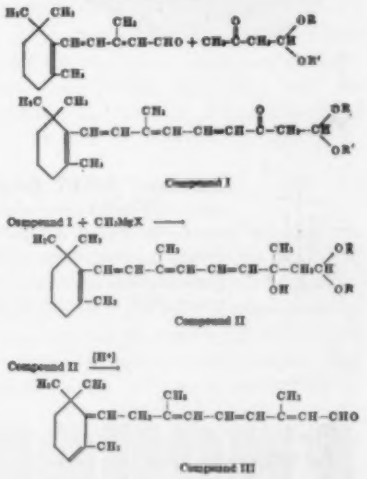
Eastman Kodak Vitamin A Patents

Eastman Kodak's research on the synthesis of Vitamin A recently bore fruit in the form of seven U. S. patents granted on April 27, 1954. While seven patents were issued, actually only four different syntheses were involved, three of the patents having been granted on special methods of preparing or treating intermediates. In this latter connection, anyone who has ever been confronted with a synthesis involving a number of steps will readily appreciate the complexity of the problem as the desired product is approached. This is particularly true in the Vitamin A synthesis where the later intermediates exhibit a somewhat cantankerous tendency to decompose, isomerize and undergo undesired side reaction, not to mention the almost innumerable possible combinations and permutations of potential reactions.

It was doubtless for this reason that Eastman Kodak saw fit to do some work especially directed to improving the preparation and treatment of some of the key intermediates.

Rather than attempt any detailed discussion of the various syntheses, it is believed preferable in the interests of brevity and clarity to set out the different syntheses by type formulae, it being noted that X means halogen and R and R′ designate alkyl radicals.

1st Synthesis— U. S. P. 2,676,988



Compound III is readily rearranged to vitamin A aldehyde in high yield by treating Compound III with a basic

*Newark, New Jersey

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ANCHOR HOCKING makes eight stlyes of metal and molded, screw and lug caps for medicinal and health products, toiletries, cosmetics and household chemicals. Each is designed for specific sealing purposes—all provide dependable, economical, attractive and efficient seals.

The uniformly high quality of Anchor Caps is the result of practical research and engineering, careful selection, testing and control of raw materials, high manufacturing standards and thorough quality control through laboratory tests and regular inspections.

If you package or contemplate packaging in glass let us recommend and send samples of the closures best suited to your particular needs. The services of our Package Engineering and Research Laboratories are also available to help you solve glass packaging problems.

Anchor® NKCT Caps are available in 15 sizes—18 to 89 mm.—lacquered, coated or privately decorated. Adaptable for a wide variety of products, their deep rolled thread rides under glass thread, pulls cap liner down tightly over entire 360° of container finish.

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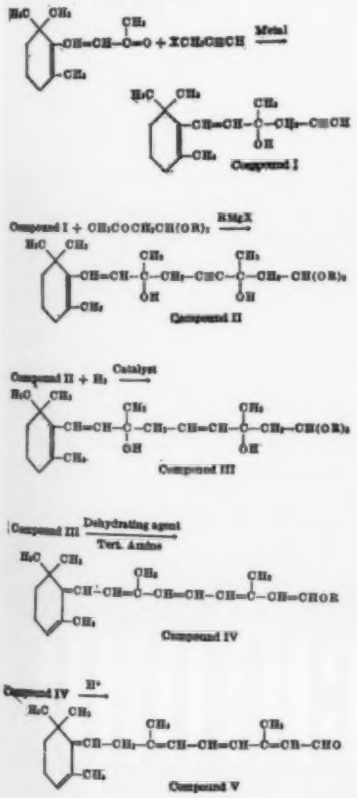
catalyst desirably in solvent solution. Any of the well-known basic materials are effective to catalyze the rearrangement which proceeds at room temperature or at elevated temperatures. Typical basic materials which catalyze the rearrangement include inorganic bases such as sodium hydroxide, potassium hydroxide and the like, basic salts such as potassium acetate, sodium acetate and the like, organic bases such as pyridine, quinoline, lutidines, picolines, piperidine, aniline; as well as basic adsorbents such as sodium aluminum silicate, alkaline soaps, and similar well-known materials of basic character.

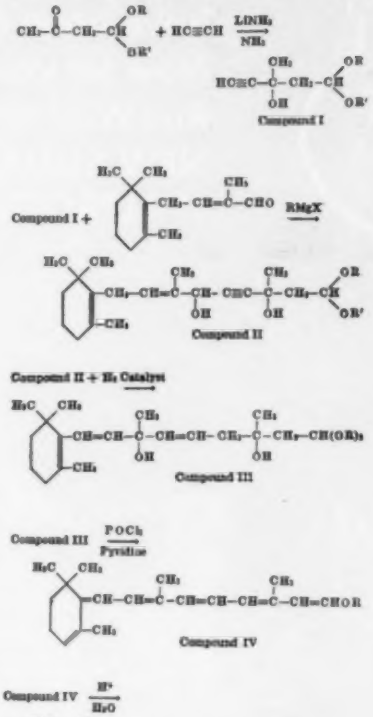
Vitamin A aldehyde is then reduced to vitamin A alcohol by well-known methods such as reduction with an ether-soluble metal hydride as typified by lithium aluminum hydride, lithium borohydride, sodium hydride or the like, or reduction with an aluminum alkoxide and the corresponding monohydric alcohol, such alkoxide as aluminum isopropoxide, aluminum t-butoxide being typical.

Second Synthesis— U. S. P. 2,676,990



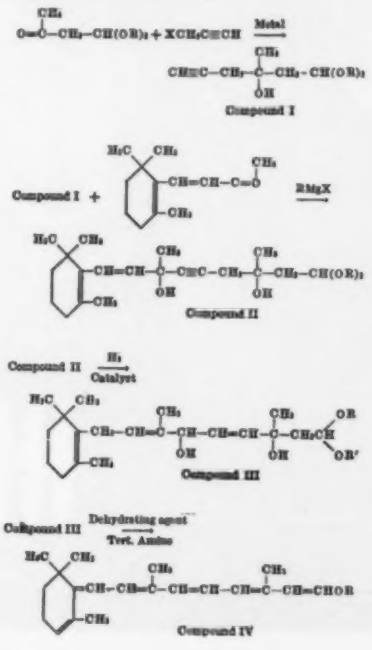
This latter compound is Compound III of U. S. P. 2,676,988.

Third Synthesis— U. S. P. 2,676,992



This latter compound is Compound III of U. S. P. 2,676,988.

Fourth Synthesis— U. S. P. 2,676,994

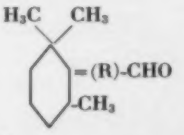


This latter compound is Compound IV of U. S. P. 2,676,992.

U. S. 2,676,989

This patent deals with a method of preparing Compound III of U. S. 2,676,988. The method is perhaps best stated by claim 1 of the patent which follows:

The method of making an alpha, beta-unsaturated, completely conjugated 1-cyclohexen-1-ylic polyene aldehyde which comprises treating a solution, in an organic solvent, of a 2-cyclohexen-1-ylidenic aldehyde of the formula



wherein R is an unsaturated aliphatic hydrocarbon radical containing at least five carbon atoms and including a single chain —CH_2— group, said —CH_2— group being in an even-numbered position from the ring, with a basic catalyst, and thereby converting said 2-cyclohexen-1-ylidenic aldehyde to an alpha, beta - unsaturated completely conjugated 1-cyclohexen-1-ylic aldehyde containing no —CH_2— group in the aliphatic hydrocarbon radical.

U. S. 2,676,991

This patent deals with the one step treatment of Compound III and similar compounds of U. S. 2,676,990 in order to make the Vitamin A aldehyde in a single step. The idea here is to heat a mixture of a hydroxy polyene acetal having the carbon skeleton of Vitamin A and ionizable acid and an organic base and thereby, in a single reaction mixture, dehydrate, hydrolyze and rearrange such hydroxy Vitamin A acetal to Vitamin A aldehyde.

U. S. 2,676,993

This patent deals with the preparation of Compound III of U. S. 2,676,990 as well as the preparation of similar compounds. The idea is to prepare the enol ether of Vitamin A aldehyde from a hydroxy polyene acetal having the basic carbon skeleton of compounds of the Vitamin A series by heating a mixture of such hydroxy polyene acetal, in solution in a tertiary amine, with ionizable halogenide which exhibits acidic characteristics but is free of ionizing hydrogen atoms.

(Continued on page 883)

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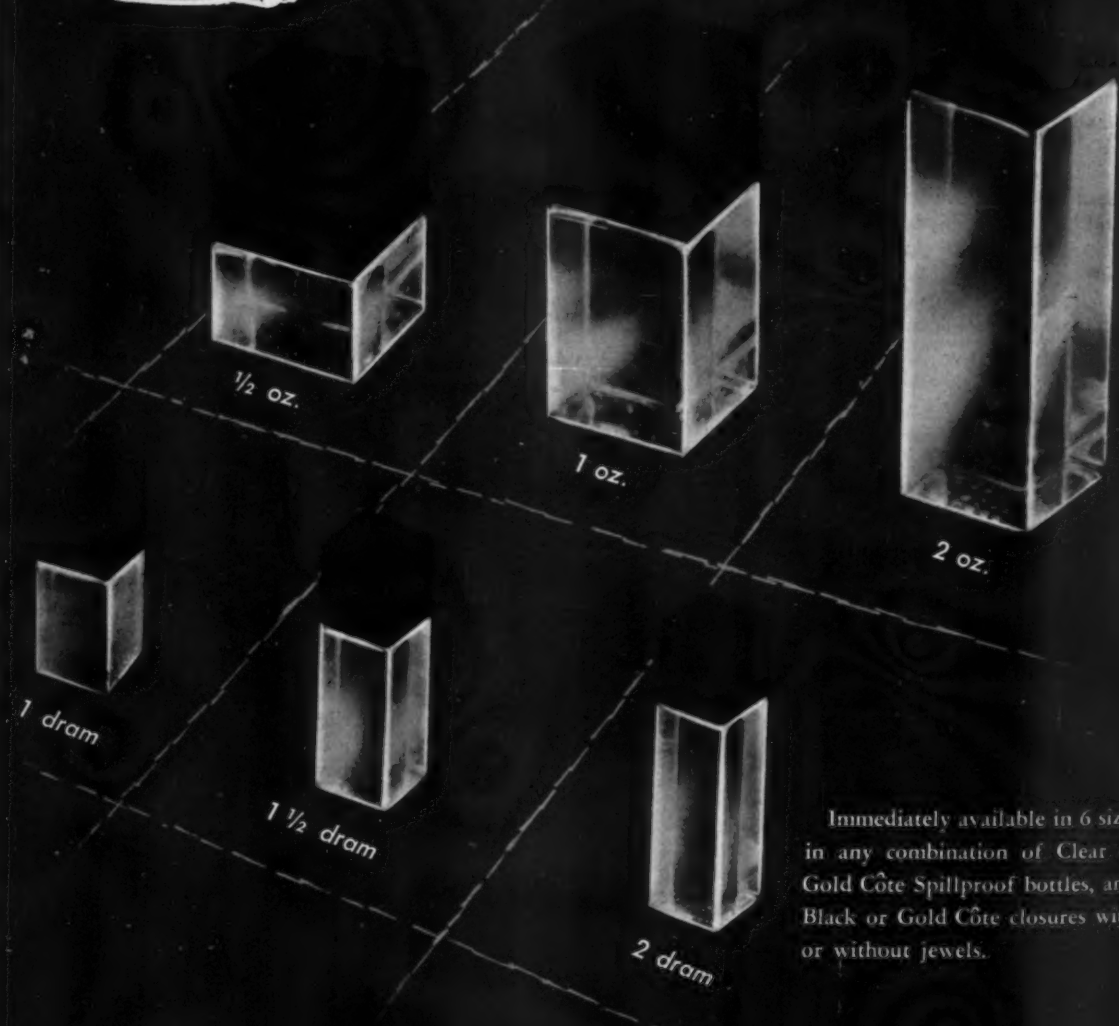
Now let your Imagination
Run Wild with these
NEW SQUARE
SPILLPROOFS



Immediately available in 6 sizes in any combination of Clear or Gold Côte Spillproof bottles, and Black or Gold Côte closures with or without jewels.

The smartest lines in 1954
will feature these sensational flacons.

Write today for samples and prices.

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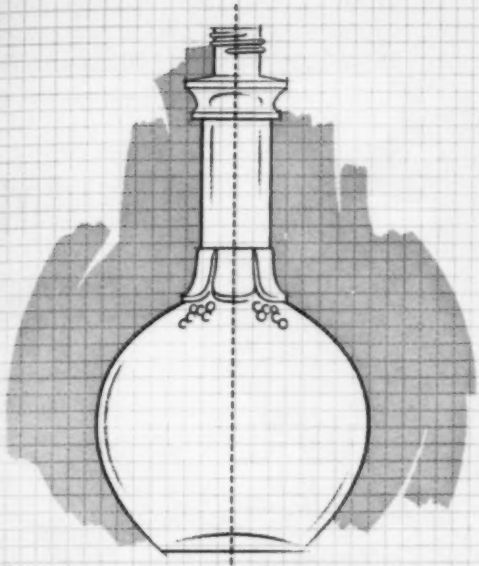
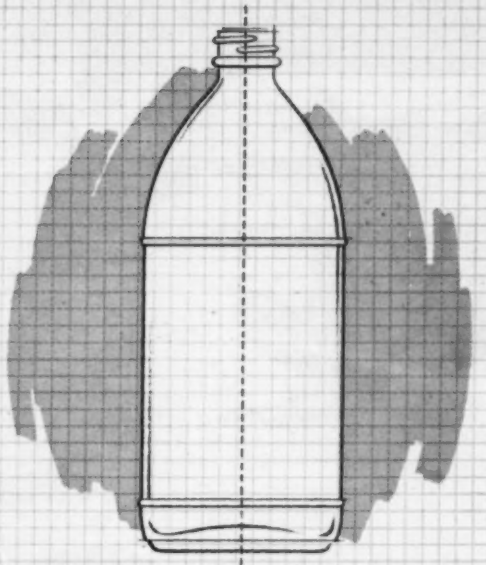
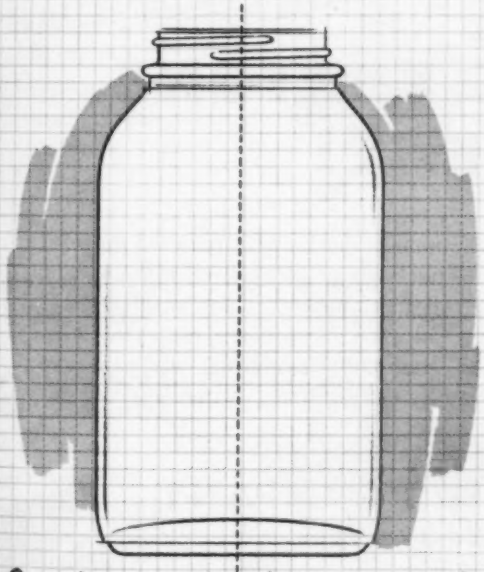
Who makes a package a SALESpackage?



A package designer who creates beauty to capture shopper's attention?



A package engineer whose concern is protection for the product inside?



A package merchandising expert who finds out what conveniences consumers want?

All three— design, engineering and marketing— may be necessary to solve your problems

Beauty of design will not be enough if you fail to meet requirements of high-speed filling lines. Product protection to the retail shelf may fall short of protection during actual use. The Owens-Illinois method of systematic investigation of packaging problems by engineers, designers and marketing experts is the big reason why successful packages so consistently come from Owens-Illinois.

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AN (I) PRODUCT

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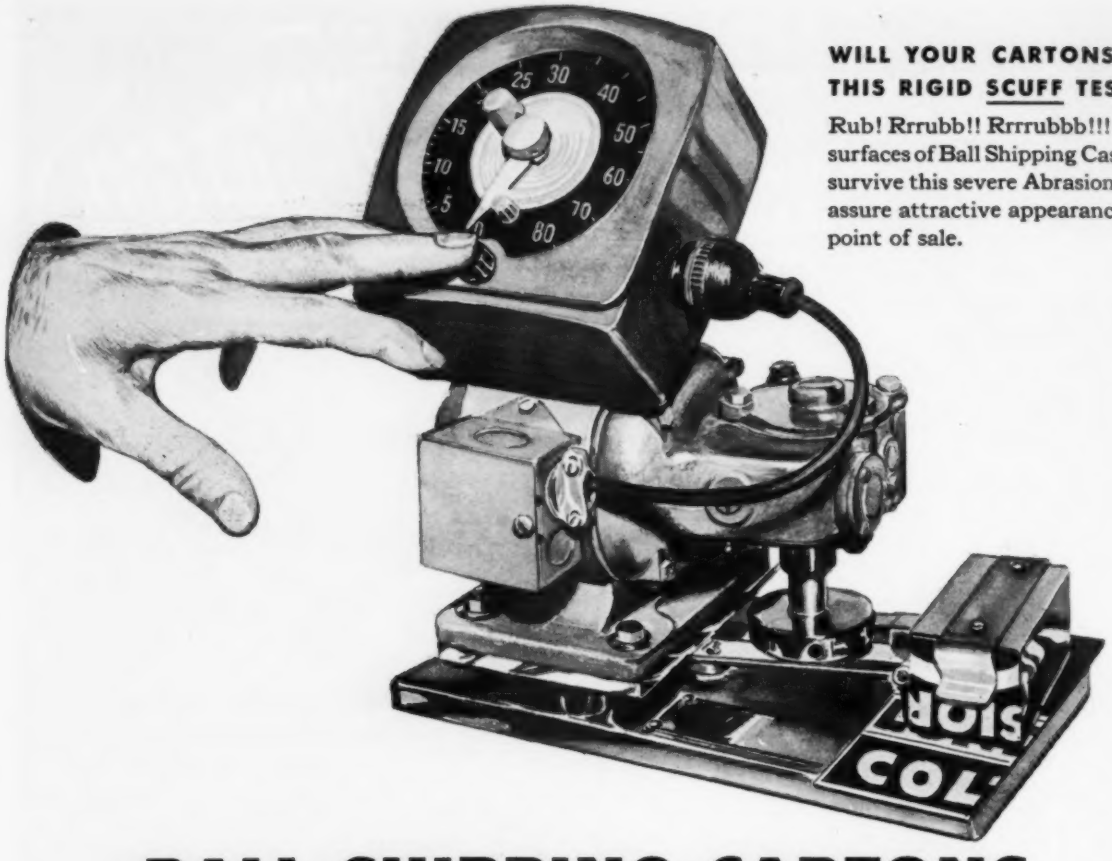

WILL YOUR CARTONS PASS THIS RIGID SCUFF TEST?

Rub! Rrrubb!! Rrrrubbb!!! Printed surfaces of Ball Shipping Cases must survive this severe Abrasion Test to assure attractive appearance at the point of sale.

BALL SHIPPING CARTONS CAN TAKE IT!

Ordeals like this "scuff test" in our Packaging Research Laboratory prove the ruggedness of Ball Shipping Cartons. Every case must be able to withstand hard usage and keep neat looking *outside*, while protecting the Ball Glass Containers *inside*.

Such research also helps us to avoid wasteful "over-packaging." We use no more weight or strength than needed for ample safety. Since shipping cases often represent 25% of all glass container costs, you can save plenty by calling Ball . . . first of all!

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LET US SEND YOU our new brochure, "The Door to Better Packaging." It contains interesting details of the many tests used to maintain carton quality and economy. Address Ball Brothers Co., Dept. DC6, Muncie, Ind.

CALL BALL FOR QUALITY GLASS CONTAINERS, METAL CLOSURES, AND PACKAGING ENGINEERING SERVICE

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all three with PLAXPAK bottle

impulse appeal

Spectrum-wide choice of colors to spur sales at point-of-sale.

use appeal

Ease of squeeze dispensing to increase consumption at point-of-use.

repeat appeal

Use convenience and shelf-impact combine to foster brand loyalty.

The Plaxpak bottle "fights" for your product at the point-of-sale, re-sells it at the point-of-use and so brings customers back for more. Plax has unequalled experience in plastic bottle packaging—let us help you produce another merchandising success.

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PLAX CORPORATION

WEST HARTFORD, CONNECTICUT

PLAX CANADA, Ltd., Montreal & Toronto

NEWS...

Prindle, Research Director

Dr. Robert Franklin Prindle has been named director of research, Lehn & Fink Products Corp., according to Edward Plaut, president. He will direct research projects and policies designed to accelerate the continuing growth of the company by developing and recommending new products and improvements in present products for expanding sales and assuring minimum quality at minimum costs.

DR. ROBERT F. PRINDLE

Duemler, V.P., Crown Can

Robert F. Duemler has been appointed divisional vice-president in charge of sales of the Crown Can division, Crown Cork & Seal Co., according to George W. Crabtree, vice-president and general manager of that division. He will make his headquarters in Philadelphia. He had formerly been vice-president in charge of sales for the West Virginia Coal & Coke Corp.

Gerden, Abbott Gen. Counsel

Paul Gerden, a member of the legal department since 1949, has been appointed general counsel of Abbott Laboratories, according to Dr. Ernest H. Volwiler, president and general manager. Alfred W. Bays, secretary and general counsel of the company since 1918, will continue as secretary and counselor.

Veldee with Stanford Inst.

Dr. Milton V. Veldee, for 30 years a medical officer with the U.S. Public Health Service, has joined the staff of Stanford Research Institute as chairman of the Biology Department.

Named V.P., SKF Internat.

Richard Pfizenmaier has been named vice-president of Smith, Kline & French International Company, a subsidiary of Smith, Kline & French Laboratories. He had formerly been International Company's sales manager.

SKF Research Program

Dr. Percy L. Julian, president of the Julian Laboratories, Inc., Chicago, and his research group, have completed arrangements for a program of cooperative research with the scientists at Smith, Kline & French Laboratories, according to W. Furness Thompson, SKF vice-president of research and development.

DR. PERCY L. JULIAN

New Building for Wyeth

Wyeth Laboratories last month broke ground for its new headquarters building in Radnor Township, 12 miles west of Philadelphia. Scheduled for completion in July, 1955, the structure will house the executive and sales offices and research laboratories of the company now located at 1401 Walnut St. and 900 North Broad St.

The Wyeth plant at 12th and Washington Ave., Philadelphia, will not be affected by the move.

Company executives who participated in the ground-breaking ceremonies, were Harry S. Howard, president; H. W. Blades, executive vice-president; R. A. Beeson, vice-president; Stuart V. Smith, vice-president and director of sales; Frank N. Hoffmann, treasurer; and John D. Cash, vice-president.

Tom Fields Expansion

Tom Fields, Ltd., manufacturer of Tinkerbell Toiletries, has purchased and moved into new and larger headquarters at 48 Prospect St., Yonkers, according to Myron and Martin Greenfield, principals of the firm.

Retires from Continental Can

Lawrence J. La Cava, sales manager of national accounts since 1944, has retired from Continental Can Co. He has been with the company since 1920, having begun his career as a salesman for general line cans in the New York City district.

Maple Named Gen. Manager

Frank E. Maple, previously general sales manager for industrial chemicals, has been appointed general manager of the industrial chemicals sales department of Commercial Solvents Corp., according to W. Ward Jackson, vice-president in charge of the petrochemicals division

FRANK E. MAPLE

Noh Appointed Consultant

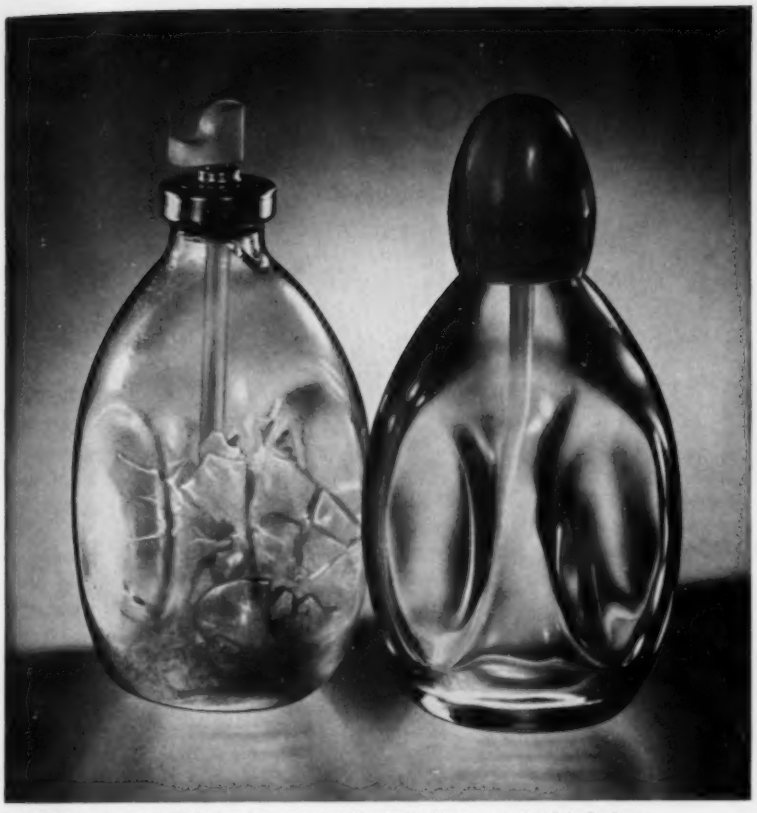
Joseph G. Noh, who retired a year ago as vice-president and sales director of Winthrop-Stearns Inc., has been appointed consultant on medical supplies to the Medical Task Force of the Commission on organization of the Executive Branch of the Government (Hoover Commission), according to Chauncey McCormick, task force chairman.

Himmel, Advg. Director, VCA

Martin Himmel has been appointed advertising director of the Vitamin Corp. of America, according to Morton Edell, president. During the past year he has been vice-president of the company's Canadian subsidiary in Toronto where he supervised the promotion and distribution of Rybutol in Canada.

Jacobs with Tussy

Robert Jacobs, formerly with the Puritan Compressed Gas Corp., has been appointed junior sales representative of Tussy Cosmetiques. He will assist Al Bergstrom in wholesale work in the state of Michigan.



Bottle at left, dropped 25 feet onto concrete, illustrates the unusual safety feature of these plastic containers.

New Wheaton bottle showing the plastic wrap cut away.

New Safety Aerosol Bottles of Glass-Lined Plastic

They were developed by Wheaton Plastics Co. to satisfy a long-felt need... their usefulness and beauty will help build sales for your product . . . their plastic coating makes them safe even if they should break when dropped.

Now, for the first time, you can combine in your product package the matchless *spray* of aerosol, the shatterproof *safety* of plastic, and the powerful *display appeal* of glass. This new Wheaton glass-lined plastic aerosol bottle offers many long-needed practical features . . . and, in addition, it will give your product an exciting promotional plus.

The sturdy plastic coating gives complete protection. If the bottle should drop and the glass break, the glass will never spatter . . . for it *cannot cut through the cover.*

There are many other advantages, too. For example, you always get a true aerosol *spray*—not a squirt or stream. And there is no corrosion or leakage.

Wide variety of sizes, shapes, colors

These bottles are available in the three stock designs shown in the photographs, or they can be molded to your own special design in sizes up to 4 oz. You have your choice of transparent, translucent or opaque plastic, the latter two in a full range of colors. We can silk-screen any design in any color on the plastic or the glass itself.

If this unusual new packaging lends itself to your product . . . if you want the boost of a powerful new sales-building feature . . . write today for complete information and prices.

Patent applied for

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with McKESSON & ROBBINS' TAWN...the brush is purely ornamental

Yes, the brush is old...
and purely ornamental. Popular Tawn
Brushless Shave is new...and efficiently
serves the comfort of modern men.
Two such established firms as Sheffield
Tube and McKesson & Robbins, Inc.,
are old hands at turning their experience
into new packaging concepts that
make pleasant music on the cash register!
For collapsible tubes better designed
to sell and protect, try Sheffield
Process Tubes on your next order.

THE SHEFFIELD TUBE CORPORATION

Factory and Home Office: New London, Connecticut • Sales Offices: New York • Chicago • Los Angeles

DR. GUSTAV J. MARTIN

Martin, V.P., National Drug

Dr. Gustav J. Martin has been elected vice-president of the National Drug Co., according to A. B. Collins, president. He joined the company in 1944 as research director and has been responsible for the development of new drugs and pharmaceuticals that now account for some 81 per cent of total sales.

50 Years for J. T. Baker

The J. T. Baker Chemical Co. is this year celebrating its 50th anniversary as a manufacturer of high-purity chemicals. The six small buildings comprising the original Baker plant have been replaced by over 100 buildings with modern equipment and facilities for handling Baker's research, production, warehousing and sales operations. Plans are now on the drawing board for a new research laboratory to be erected adjacent to the present plant at Phillipsburg which will permit greater concentration of effort upon the development of new chemicals for medicine and industry.

The company was founded in 1904 by John Townsend Baker for the purpose of supplying laboratory chemists with chemicals as pure as could be produced commercially. His idea was to label each chemical with an accurate analysis of any significant impurities, to save the chemist's time and increase the accuracy of his results.

The early years were devoted entirely to laboratory chemical manufacture. Subsequently, the technique used in producing these fine chemicals was applied to making fine and industrial chemicals of high quality.

In 1941 the Vick Chemical Co. acquired the outstanding stock of J. T. Baker to further its objective of attaining greater diversification of its holdings. Since 1945, 18 new manufacturing units with accompanying control facilities have been built.

DR. RAY C. HOUTZ

Houtz with Toni

Dr. Ray C. Houtz has been appointed director of basic research operations of the Toni division of the Gillette Co., according to Raymond E. Reed, vice-president in charge of technical operations.

He had previously been manager of the organic chemical research in the textile fibers pioneering research division at the du Pont Experimental Station in Wilmington.

Named V.P., Roure-Dupont

Jacques D'Aigremont has been elected vice - president of Roure - Dupont, Inc., according to Louis Amic, president.

Honored by Cos. Chemists

Mrs. Eunice Thomas Miner was awarded an Honorary Membership in the Society of Cosmetic Chemists at its semi-annual technical meeting in New York last month, in recognition of her valuable contributions to the Society. She is executive director of the New York Academy of Sciences, as well as being a Life Member and Fellow.

E. RICHARD KUEHNE

Kuehne, District Sales Mgr.

E. Richard Kuehne, assistant district sales manager in the Chicago area for Mallinckrodt Chemical Works, has been appointed Chicago district sales manager, according to G. C. Bradshaw, western division sales manager. He will be in charge of sales activities in Chicago and surrounding communities. This is part of the territory formerly supervised by the late Walter R. Nay.

Mr. Kuehne was confined to the Evanston Hospital, Evanston, Ill., early last month, where he was undergoing treatment for an eye ailment. Until he is able to take charge of the Chicago district, Warren F. Michener, manager of the laboratory chemical sales division in St. Louis, will temporarily supervise the Chicago office.

Miss Little Heads Ass'n

Gretchen D. Little, Atlas Powder Co., was installed as president of the Special Libraries Association at the annual business meeting of the Association held in Cincinnati last month. She is in charge of technical library service for all Atlas Powder Co. plants and offices throughout the United States.

Among speakers who addressed technical sessions of Society of Cosmetic Chemists at regular spring meeting, Hotel Biltmore, New York, on May 14. Left to right, front row: Walter J. Hamburger, Raymond Stevens and D. W. Brookfield; back row, W. C. Griffin, Gerald Oster, R. S. Manly and Norman Rosenthal.

Deodorants with G-11®

(Brand of Hexachlorophene)

remove the cause of body odor

Soaps, detergents, creams, colognes, sticks and lotions containing G-11 are making dramatic sales increases because they combat the fundamental cause of body odor.

Body odor, particularly underarm odor, is caused by the action of skin bacteria on perspiration. Research has shown fresh perspiration to be odorless until it is contaminated with skin bacteria. G-11 combats these bacteria and thus removes the basic cause of the odor.

G-11 remains on the skin, even from soaps which are thoroughly rinsed off with water. Thus the deodorant action persists for days. Persons who have used deodorants with G-11 for three and four years show no immunity to their action.

Over seventy scientific articles, mostly by independent researchers, have been published over the last ten years attesting to the antibacterial and deodorant performance of G-11.

In addition, G-11 is not perceptible while on the skin, has no harmful effect on clothing, is compatible with perfumes, is readily soluble in soaps and cosmetic formulations, and is non-staining and non-irritating.

Write now for technical bulletins and formulas for G-11.

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Seattle • Los Angeles • Toronto

JOHN R. O'MEARA

JAMES A. SHORT

MACLAY J. SALFISBERG

Halliday, V.P., Smith Co.

Herbert E. Halliday has been elected vice-president and secretary of the Martin H. Smith Co. He had formerly been assistant to the president of the Tailby-Nason Co.

Fifty Years for Van Dyk

Van Dyk & Co., Inc., Belleville, N. J., is celebrating its golden anniversary, having been organized in 1902 by the late L. A. Van Dyk and Dr. Samuel Isermann, and incorporated in 1904. The company is said to be one of the first American manufacturers of synthetic aromatic perfumery chemicals and other perfumery raw materials.

Mr. Van Dyk remained with the company until 1910, after which, Dr. Isermann, headed the firm until his death in 1949. His brother, the late Max Isermann, was also actively associated in the firm's management for several years.

Van Dyk began operation on a laboratory scale in 1903 on Cedar St., New York, subsequently moving to larger quarters, and in 1914, to Jersey City. The present Belleville factory was acquired in 1943.

During both world wars the company turned out many products essential to national defense, such as high boilers, plasticizers and aircraft necessities and, in the second war, plasticizers and flash-retardants for smokeless powder along with insect-repellent material and sun-screening compounds for the Army.

In addition to aromatics, Van Dyk has a broad line of flavoring materials and cosmetic raw materials and is constantly adding new products to its wide line.

Mrs. Samuel Isermann, widow of the late Dr. Isermann, is president of the company; Howard Isermann is vice-president and treasurer; Walter Mueller, vice-president and sales manager; and Helen V. Shanahan, secretary.

Named V.P.'s by Ivers-Lee

James A. Short has been elected vice-president and treasurer; John R. O'Meara, vice-president and general sales manager; and Maclay J. Salfisberg, vice-president in charge of personnel and package control, of the Ivers-Lee Co., according to Lloyd I. Volckening, president. These elections were made at a meeting of the board of directors in April.

Frank F. Law Lab. Dedicated

The new Frank F. Law Laboratory of the Temple University School of Pharmacy was dedicated recently as a living memorial to Mr. Law who died in 1950. Ceremonies were held in the auditorium of the School of Pharmacy of the University, with more than 700 alumni and friends of the school present.

Mr. Law was a vice-president of Wyeth at the time of his death.

Bogner Visits N.Y.

Franz Bogner, now living in Winter Park, Florida, with his laboratory in Orlando, in a recent trip to New York, put Mrs. Bogner on the boat for a visit to Europe. He attended the T.G.A. convention last month.

Gage, Yale Treasurer

Charles S. Gage, formerly president of the Mathieson Products Corp. and Lentheric Inc., subsidiaries of the Mathieson Chemical Co., has been appointed treasurer of Yale University, according to A. Whitney Griswold, president. He replaces Laurence G. Tighe, who resigned last year for reasons of health.

Blackstead Visits Rep.

Eric N. Blackstead, vice-president in charge of sales, Ansbacher-Siegle Corp., visited the company's West Coast sales representative, Robert E. Flatow of R. E. Flatow & Co., San Francisco, in April and early May. He was accompanied by his wife, Betty, and son, Carl.

Goodwillie with Ungerer

Stuart Goodwillie has been appointed general sales manager for Ungerer & Co., according to Kenneth G. Voorhees, president. He has had a broad and varied sales experience over the past 25 years, his associations having been with E. I. du Pont, with management consulting firms, and, more recently, a sales executive with Sylvania Electric Products, Inc., for more than 11 years.

Belleville, N. J., plant of Van Dyk & Co. which is celebrating its golden anniversary, having been incorporated in 1904. Company has broad line of aromatics, flavoring materials and cosmetic raw materials.

now you can profit from "PRIVATE BRAND" PRODUCTION with complete confidence

Today, more than ever, production of many popular trade-marked products is handled by private brand manufacturers. The reason is clear. Use of private brand manufacturing facilities enables trade-mark owners and distributors to concentrate closer attention and more capital on the increasingly important aspects of promotion, distribution and sales. Use of private brand manufacturing facilities avoids the many headaches of technical and labor difficulties that seem inevitable when you do your own manufacturing. Use of private brand manufacturing facilities, moreover, enables you to avoid the expense of plant equipment and helps you operate with closely trimmed inventories without tying up valuable liquid assets.

Even firms with their own manufacturing plants wisely use private brand manufacturing facilities to supplement their own production. They turn to the private brand manufacturer for runs of new products, thus eliminating the installation of special machinery. They depend on the private brand manufacturer for expanding production or to help meet delivery dates at peak periods without swamping their own plant facilities. Increasingly, they look to the private brand manufacturer for new ideas and profitable products.

But always remember this . . .

When you use private brand manufacturing facilities, it is *your* brand name that appears on the finished product—*your* reputation is at stake. Obviously, you must have every certainty that the quality, the purity, the uniformity of your product will at all times be maintained. It is only good sound business to contract with a private brand manufacturer possessing the facilities and know-how to produce *your* product to highest specifications. Only in this way is your investment *in your own brand* and your relations with *your customers* protected to the fullest.

The National Association of Private Brand Manufacturers, Inc., is a non-profit association of select manufacturers and contract packagers in the pharmaceutical, cosmetic, soap and household chemicals fields whose objective is primarily to assure you of the highest quality, dependability and service. Look for the Seal which not only promises these high standards, but guarantees that they will be maintained in all transactions.

Learn how you can use "private brand" production with complete confidence whether the order is small or large. We will be glad to recommend member private brand manufacturers best equipped to handle your requirements.

What NAPBM Stands For

A non-profit association of select private brand manufacturers, the NATIONAL ASSOCIATION OF PRIVATE BRAND MANUFACTURERS, INC. has as members only firms adhering to the highest standards in private brand manufacturing. Its aims are to:

- preserve, maintain, and improve the integrity and quality of private brand production.
- act as a clearing house for information on private brand manufacturing facilities
- disseminate business and technical information
- review labeling, advertising and marketing practices of members
- clarify government regulations
- help its members help their customers

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PHARMACEUTICALS • COSMETICS • SOAPS • HOUSEHOLD CHEMICALS

Honored by Strong, Cobb

John Mason and Al Krogg, who have been with Strong, Cobb & Co., respectively, for 43 and 41 years, were entertained at luncheon by M. M. Ricketts, president, and George Burke, secretary, on April 9. Other guests at the meeting were Del Mason (28 years), Robert Albrecht (31 years), George E. Burke (20 years), Richard H. Herbine, Clifford F. Taylor, and Murray Breese, Murray Breese Associates, Inc.

Left to right: Del Mason; John H. Mason; M. M. Ricketts, president, Strong, Cobb & Co.; Alfred H. Krogg and George E. Burke attending luncheon on April 9 in honor of John Mason and Mr. Krogg. They have been with the company 43 and 41 years, respectively.

Hubata, Med. Director

Dr. Joseph A. Hubata has been appointed medical director of the Armour Laboratories, according to Edgar L. Patch, general manager. He had been associate medical director on special assignment and more recently served as acting director.

Mr. Hubata succeeds Dr. Albert H. Holland, who resigned to become medical director of the Food & Drug Administration in Washington, D. C.

Named Gen. Counsel, McNeil

Robert L. Leininger has been appointed general counsel of McNeil Laboratories, according to Robert Lincoln McNeil, president. He has also been named to the executive committee. Mr. Leininger had previously been assistant secretary.

Fralich, V.P., Roche, Ltd.

John S. Fralich has been appointed vice-president and managing director of Hoffmann-La Roche, Limited, Montreal. He had formerly been president of Strong Cobb, Limited, Canada. Dr. Ruth L. Wolfe, long associated with the company, retains her position as medical director.

A. A. Searle is manager of the bulk vitamin division; John Hassinger, sales manager of the specialty division; and M. C. Dressler, business manager.

Berger with Fleuroma

Charles Berger has joined the executive staff of Fleuroma, Inc., and will be in charge of a new perfume laboratory now being established as part of the company's expansion program. Mr. Berger has had extensive experience as a perfumer in Vienna and Paris, and is equally well known in this country, where, for 15 years, he was the chief perfumer of Felton Chemical Co.

Paul Lelong with Firmenich

Paul H. Lelong has joined Firmenich Inc. as perfumer. He had formerly been chief perfumer for Richard Hudnut, and has had many years of experience in synthetic aromatics and essential oils, as well as the finished goods industry.

Named Research Rep., Cutter

Bob Finney has been appointed to the new position of research representative at Cutter Laboratories, according to Fred A. Cutter, vice-president. He will be in charge of field testing Cutter's new pharmaceutical and hospital products.

New Sales Headquarters, DPI

Distillation Products Industries division of Eastman Kodak Co. is moving executive and sales offices into new quarters this month at Rockefeller Center, Inc., International Building, 630 Fifth Ave.

This location will be used at divisional sales headquarters under the direction of Frank Dowe, sales manager.

Borden Promotions

Dr. J. F. Muller, formerly prescription products research director, the Borden Co., has become assistant general manager of the prescription products department of the special products division, according to C. F. Kieser, vice-president in charge of that division.

He has been replaced in his former position by Dr. David W. Anderson, Jr., who joined the special products division a year ago as technical service director.

Joseph W. Sheldon has been promoted to administrative assistant to Dr. Muller and Harry McNeilly, general manager of the prescription products department. He has been with Borden's since 1936 when he joined the traffic department.

JOHN S. FRALICH

DR. J. F. MULLER

DR. DAVID W. ANDERSON, JR.

CASE HISTORY

Another tough problem solved by an Emery Product

How Emersol Stearic Acid Eliminated Bleaching-Saved ½¢ a Pound

By using Emersol 132 Lily Stearic Acid in place of an ordinary triple-pressed type, this manufacturer of *esters* was able to attain the desired color of his product *without bleaching* and without spending extra money, because Emersol Stearic Acids cost no more than ordinary grades.

In this actual case, the exceptional *color-stability* of Emersol 132 resisted the darkening that normally occurred during high-temperature esterification. Not only was the cost of bleaching eliminated (labor and materials), but the yield of finished product increased by the amount normally trapped in the discarded filter cake.

The outstanding stability of Emersol Stearic Acids can mean as much to you. Even where color is not of primary importance, their superior resistance to rancidity and to oxidation are extra benefits that make any product *more salable*. Since they cost no more than ordinary grades, it will *pay you* to use Emersol Stearic Acids—available in all grades to suit your specific need. Next time...everytime...buy Emersol Stearic Acids.

IF YOU USE A DOUBLE PRESSED GRADE...

Here's one of many reasons why Emersol 120 Standard Stearic Acid is preferred over competitive double-pressed grades. These colors of *glyceryl monostearates* clearly show the value of the outstanding *color stability* of Emersol 120. The monostearates were esterified for 5 hours at 250° C, under a CO_2 blanket, with no bleaching or refining.

Glyceryl Monostearate made from	*Lovibond Color (5¼" Cell)*
Emersol 120 Standard Stearic	6Y/2.7R
Competitive Double Pressed "A"	9Y/4R
Competitive Double Pressed "B"	28Y/8.5R

Write Dept. D-6. for full information on all Emersol Stearic Acids.

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New P-D Lab. in Caracas

Parke, Davis & Co. has opened a new 25,000-square-foot manufacturing laboratory and branch office in Caracas, Venezuela, according to W. R. Jeeves, vice-president and director of overseas operations. Attending the opening from Detroit were W. H. Bundesen, assistant director of Parke-Davis' overseas division in charge of Latin American operations, and W. R. Richardson, director of overseas liaison.

Ramon I. Arozarena is manager of the Caracas office and laboratory, while Dr. Roger Vivas Decanio, a registered pharmacist of Venezuela, will be manufacturing superintendent. Fernando C. deSostoa, who has been a supervisor in the antibiotic division in Detroit, will be technical assistant to Dr. Vivas.

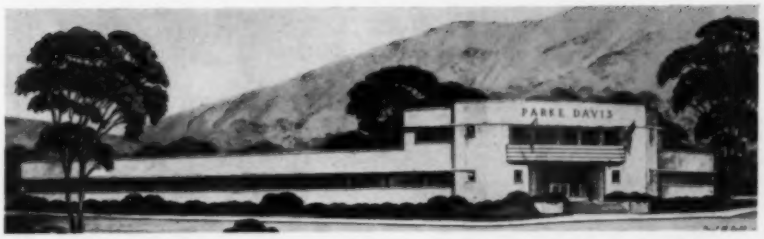
The initial production of the laboratory will be a line of Parke-Davis liquid medicinals, to be followed by tablets, capsules, ointments, creams and germicidal soaps. Full production is expected within six months.

Valko Returns to Onyx

Dr. Emery I. Valko has been appointed director of research, Onyx Oil & Chemical Co., and will head all research activities. He had previously been associated with the company from 1939 to 1946, and during the intervening years, was a project leader with the Polytechnic Institute of Brooklyn. He was at the same time an independent research consultant in the textile and allied fields.

Named V.P.'s by Colgate

Robert E. Hilbrant and Marshall S. Lachner have been elected vice-presidents of the toilet articles and soap sales divisions, respectively, of the Colgate-Palmolive Co. Mr. Hilbrant joined the company in Chicago in 1924 as assistant office manager, and Mr. Lachner, in 1938, as displayman.



Architect's drawing of new Parke, Davis & Co. branch office and manufacturing laboratory, Caracas, Venezuela. Structure is so designed that a second floor can be built over manufacturing area when future expansion demands.

With Winthrop 25 Years

A. W. Pangrace and John A. McGlothlin were honored at a dinner last month by Winthrop-Stearns Inc. on the completion of 25 years of service with the company. Mr. Pangrace is in charge of a department producing and filling a group of drug products and Mr. McGlothlin administers the payroll section, both being employed at the Myerstown, Pa., plant.

The men were admitted to membership in the "Quarter-Century Club" by Dr. Theodore G. Klumpp, president. Among those present at the celebration were Dr. F. J. Stockman and Dr. Lasersohn, vice-president; Dr. M. J. Tainter, director of the Sterling-Winthrop Research Institute; Dr. A. Sherndal, Rensselaer plant manager; Dr. J. B. Rice, director of medical research; Charles B. McDermott, vice-president in charge of sales; and Donald S. Shepherd, Myerstown plant manager.

The Club now is made up of six members, the other four, who also were present at the dinner, being Hugh H. Hamrick, Arnold O. Horne, J. Gordon Thrasher and Harry E. Strasz.

Morone with Rhodia

P. J. Morone, formerly with Magnus, Mabee & Reynard, has joined Rhodia, Inc. as a member of its aromatic chemicals and specialties sales staff.

Chemists' Club Elections

Ira Vandewater, president of R. W. Greeff & Co., was elected president of the Chemists' Club at its 55th annual meeting last month. He succeeds William F. George of Hooker Electrochemical Co.'s New York office.

Serving with Mr. Vanderwater for one-year terms are the following new vice-presidents: resident, L. V. Steck, Shell Chemical Corp.; suburban, Beverley L. Clarke, Merck & Co.; nonresident, J. H. Rushton, Chicago; and junior, William Wishnick, Witco Chemical Co., New York.

Lloyd Van Doren was re-elected secretary, while L. E. Erlandson, Union Carbide & Carbon Corp., will continue as treasurer of the club.

Four new trustees were added to the board for three-year terms: James J. McMahon, James J. McMahon, Inc.; Lawrence H. Flett, National Aniline division, Allied Chemical & Dye Corp.; John P. Remensnyder, Heyden Chemical Corp.; and Paul B. Slawter, Jr., Sterling Advertising Agency.

Returns to Neumann-Buslee

Alan H. Jespersen has returned to Neumann-Buslee & Wolfe, Inc., having served two years in the Chemical Corps of the Armed Forces. He had previously been associated with the company's technical staff and will now be concerned with sales in Chicago and the surrounding area.

ROBERT E. HILBRANT

P. J. MORONE

ALAN H. JESPERSEN

PAUL R. CURTIS, JR.

KENNETH M. IREY

FRANK D. McDERMOTT

Curtis with Sun Tube

Paul R. Curtis, Jr., has joined Sun Tube Corp. as products manager in charge of sales

Addresses Fragrance Seminars

Pierre Bouillette, Givaudan - Delawanna, Inc., took part last month in the Fragrance Seminars in Toronto and Montreal sponsored by Mrs. Rita A. Caron, publisher and editor of *Prestige* Magazine, in cooperation with the TGMA of Canada. Mr. Bouillette, author of "The Perfumer's Corner" published in *The Givaudanian*, addressed the seminars on the subject of perfume history as well as on the sources and methods of extracting perfume raw materials. He also discussed the problems involved in the actual creation of a fragrance and its manufacture.

After his address, Mr. Bouillette displayed various perfume raw materials to the audience along with the plants or woods from which they were obtained. He also exhibited several animal products used in perfumery.

Two seminars were held in each city and were attended by sales personnel of retail stores and by executives of member firms of the TGMA.

Mathieson, Olin Merger

The directors of Mathieson Chemical Corp. and Olin Industries, Inc. last month unanimously voted to submit to their stockholders at special meetings on June 29, 1954, a proposal to merge the two companies.

Van Nortwick with European Chem.

J. G. Van Nortwick, for many years associated with J. L. Hopkins & Co., and more recently with Inland Alkaloid Company, is now engaged in a sales capacity in this country and Canada for The European Chemical Co., New York.

Irey, Asst. Vice-President

Kenneth M. Irey, formerly assistant manager of the Garfield, N. J., plant, has been elected assistant vice-president of Heyden Chemical Corp., according to Simon Askin, president.

Cyanamid Offices in N.Y.

The general offices of the Fine Chemicals division of American Cyanamid Company are now located at 30 Rockefeller Plaza, New York 20, N. Y. The production and distribution of all bulk pharmaceuticals and animal feed products manufactured by Cyanamid plants in Bound Brook and Princeton, N. J., Willow Island, West Va., and Pearl River, N. Y., will be coordinated by the general offices in New York City.

The personnel of the former Calco Pharmaceutical and Lederle Animal Feed departments have been transferred to the New York offices, and customers will conduct business with the people who served them in the past.

McDermott with Wampole

Frank D. McDermott has been appointed director of domestic sales, Henry K. Wampole & Co., according to Bert W. Chiappini, president. He will supervise the distribution of Wampole's prescription specialties.

Logcher Talks on Trip

Dr. Henri F. Logcher, export manager, Magnus, Mabee & Reynard, Inc., reported on his recent world business trip to a large group of company executives at a dinner meeting on May 6 at the Hotel Astor, New York. His talk was illustrated with over one hundred colored slides of scenes in the Philippines, Japan, Hong Kong and other Asiatic and European countries.

Mr. Logcher stated that European competition in Japan was exceptionally keen because of Japanese trade agreements with Holland, France and the Sterling areas, although the situation is eased by the use of retention dollars.

Percy C. Magnus (seated), president, Magnus, Maybee & Reynard, looking up at Dr. Henri F. Logcher, export manager, as he completes a talk on recent round-the-world business trip. Event took place at dinner meeting, Hotel Astor, New York on May 6 attended by group of MM&R executives.

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FUNGAL AND BACTERIAL ACTION...

Do you have a product that needs positive protection against bacterial and fungal growth? It will pay you to look into the following advantages of using Heyden PARASEPTS to preserve the quality so essential to sales and profits:

- **High effectiveness against molds and bacteria.**
- **Extremely low toxicity confirmed by extensive tests.**
- **Non-irritating to the skin.**
- **Colorless, odorless, practically tasteless.**
- **Stable during heat sterilization.**

Research has shown that a combination of two or more Parasepts gives better protection than a single ester. There are five of them available to provide the right combination for your particular product. Write for a copy of the technical bulletin giving full information. Samples available on request.

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Technical Grades also available.
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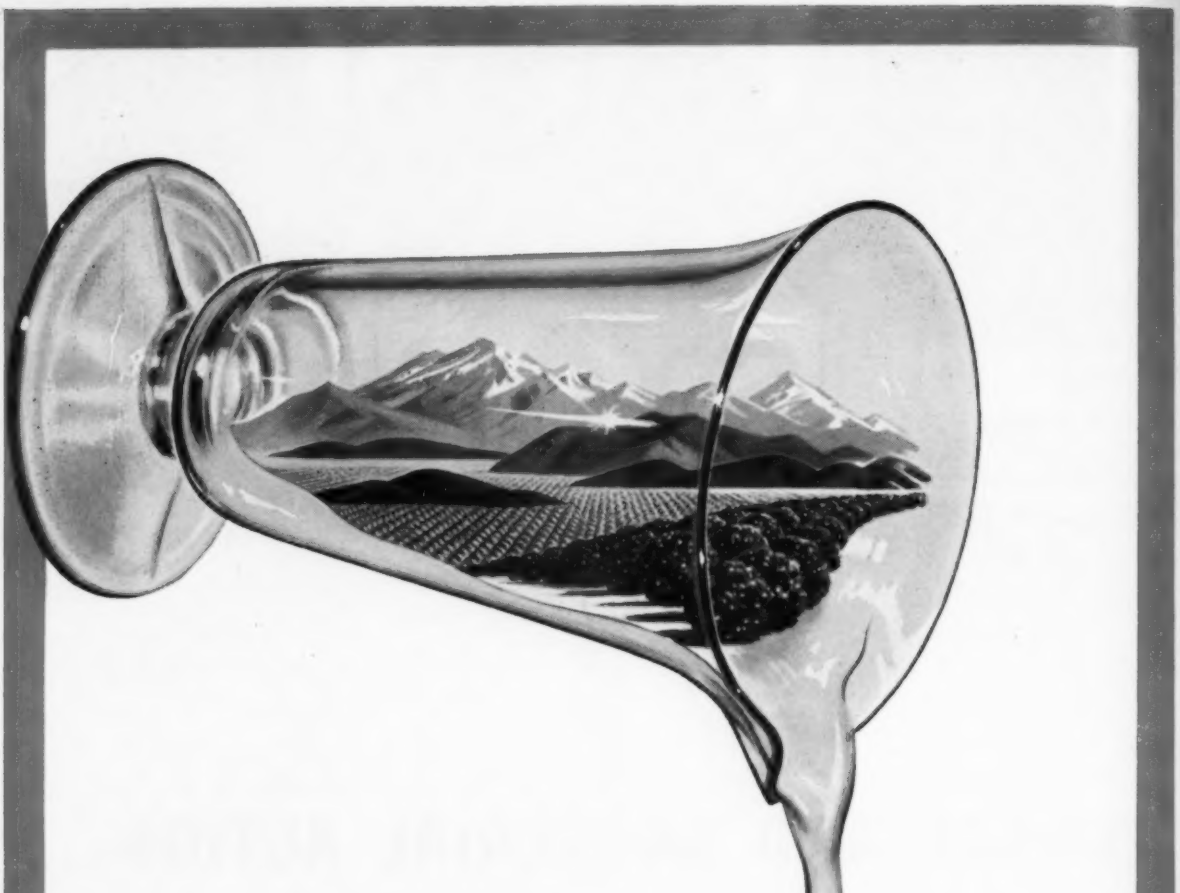

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There's a reason for the growing popularity of Exchange Oil of Orange. Only Exchange Brand combines the flavor and aroma of California oranges with *Exchange* quality. Carefully selected oranges from the famous California groves of Sunkist Growers are processed to scientific specifications in modern California plants. You receive distinctive flavor and fragrance... in addition to unmatched uniformity of strength.

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OIL OF ORANGE U. S. P.

JOHN S. COLLBRAN, JR.

Promoted by N. J. Zinc

John S. Collbran, Jr., has been named western district sales manager, Chicago office, of the New Jersey Zinc Sales Co., succeeding David P. Branin who has retired. He has been assistant western district sales manager since 1952.

Mr. Brannin served the company for over 40 years, having started in the Denver office of a subsidiary, the Empire Zinc Co., in 1913. He was transferred to Chicago as sales representative in 1921, and became office manager in 1936. He then became district sales manager in 1946 and later assumed the title of western district sales manager.

Givaudan Returns to Paris

Andre Givaudan, a director of L. Givaudan & Cie., S. A., and its affiliated organizations, returned to Paris last month after completing his semi-annual visit to the United States. While in this country, he attended the convention of the Toilet Goods Association and discussed industry problems with many friends he had not seen for quite some time.

Straka, V.P., Chesebrough

Jerome A. Straka, former executive vice-president of the Colgate-Palmolive Co., has been elected director and executive vice-president of the Chesebrough Manufacturing Co., according to Arthur B. Richardson, president.

To Build Danville Plant

General Chemical division, Allied Chemical & Dye Corp. is planning to build a large new plant at Danville, Ill., for the production of Genetron refrigerants and aerosol dispersants. While detailed plans have not been made yet, the company expects to begin construction as soon as possible, with the view to having the plant in production early next year.

Van Winkle in Atlas Post

Dixon Van Winkle has been named manager of the New York sales office chemicals department of Atlas Powder Co. He succeeds L. G. Parkinson who resigned and is now with Lever Brothers Co.

Mr. Van Winkle has been with Atlas since 1952, having previously been with Velsicol Corp.

Smith, N.Y. Sales Mgr.

Edward W. Smith III has been appointed New York district sales manager of the Bradley Container Corp., according to Henry E. Griffith, vice-president and general sales manager. In addition to the metropolitan New York area, Mr. Smith will also service accounts in Baltimore, Philadelphia, New Jersey and New York State.

Alexander Wins Roche Awards

Executives and sales representatives of the Hoffmann-La Roche vitamin division held their annual meeting at Skytop, Penna., from May 3 to 7. During the meeting W. Frank Alexander, the vitamin division sales representative in San Francisco who covers California, Oregon and Washington, received the President's Top Ten and Barell Awards for outstanding sales achievement in 1953.

Owing to an illness which confined him to his home, Mr. Alexander was unable to participate in the award ceremonies at Skytop. Mr. P. J. Cardinal, vice-president in charge of the vitamin division, arranged a telephone hook-up between Skytop and Mr. Alexander's home in San Rafael, Calif. John Tiedemann presented the awards on behalf of L. D. Barney, president.

Mr. Barney then made Mr. Cardinal an honorary member of the President's Top Ten Club in recognition of his distinguished leadership and sales achievement. He will complete 30 years of service with the company in July.

Lilly Appointments

Roscoe C. Clark has been named special staff associate in the plant communications and public relations division of Eli Lilly & Co. He will assist John F. Modrall, director of the division, specializing in the civic and community aspects of public relations and handling special related projects.

William C. Murphy has been appointed manager of public relations.

ROBERT E. KENIM

Kenim, V.P., Wheaton

Robert E. Kenim has been appointed vice-president in charge of overseas operations by Wheaton Glass Co. In addition to directing the foreign sales of Wheaton products, the newly organized overseas operations division will supervise the activities of Wheaton de Brasil, S.A., now in its second year of glass manufacturing at Sao Paulo. The new executive department will also handle relations between Wheaton and its affiliates throughout the world.

Sapery Represents Volupte Co.

Stanley Sapery Co. is the exclusive representative in the cosmetic industry for the Volupte Co. compacts and other items in the line.

Joseph A. Galvin

Joseph A. Galvin, 71, chairman of the board of Rexall Drug Co., died May 10 of a heart attack after bowling with a company team. Starting as a bookkeeper clerk with the firm in Boston 46 years ago, he became treasurer in 1920; vice-president and treasurer, from 1925 to 1929; executive vice-president, 1940 and 1941; and chairman in 1943. Surviving are his wife, two sons and a daughter.

Charles L. Lightfoot

Charles Leandro Lightfoot, for many years engaged in the glass container business, passed away suddenly of a heart attack on May 8, at his home in Metuchen, N. J. For many years Mr. Lightfoot was New York sales representative for the Salem Glass Company, Salem, N. J. When this company was taken over by the Anchor Cap & Closure Company, Mr. Lightfoot became part of Anchor, which later became Anchor-Hocking Glass Company. He was retired from this company several years ago, but still continued active in the glass container business.

DOW

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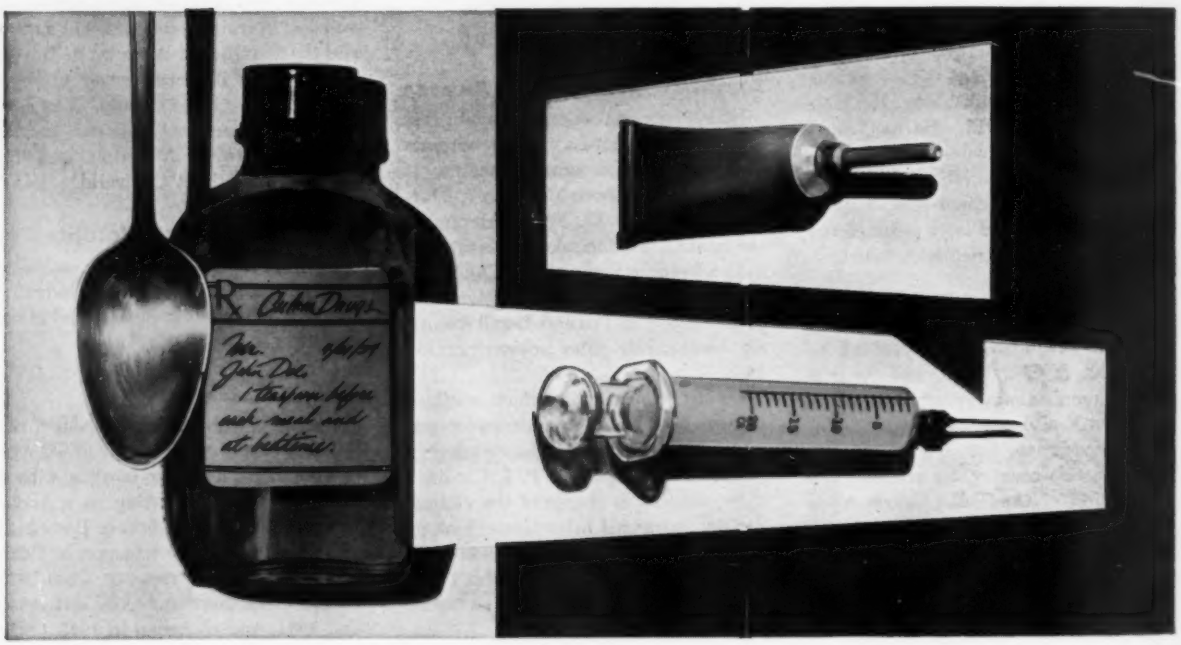
Many pharmaceutical preparations for internal consumption, topical application or injection are improved by this versatile solvent



Your first problem in the manufacture of any pharmaceutical preparation is finding the right solvent for the medicinal, a medically acceptable solvent that is also a good carrier. Propylene glycol, U.S.P., fills these exacting specifications for hundreds of approved pharmaceutical preparations today—including many designed for self-medication. It may easily do the same for your products.

The versatility of solvent properties shown by propylene glycol, U.S.P., extends to many organic chemicals used in the field of chemo-therapy, indicating its use in estrogens, antiseptics, salves, elixirs and ointments. In some formulations, the preservative action of propylene glycol is of considerable importance, while others benefit from its emollient, humectant or lubricant properties.

Standard of dependability in both quality and supply, Dow propylene glycol, U.S.P., aids product improvement for cosmetic formulators as well as pharmaceutical manufacturers—with resulting economy in many cases. For an evaluation sample and information on the properties of propylene glycol, U.S.P., send to THE DOW CHEMICAL COMPANY, Midland, Michigan, Dept. OC 830G.

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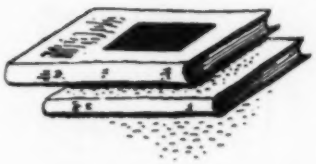

Trade Literature

Bulletin on Fumaryl Chloride

National Aniline Division, Allied Chemical & Dye Corporation, 40 Rector St., New York 6, has issued a six-page bulletin on Fumaryl Chloride which has possibilities as an intermediate in production of dyestuffs, insecticides, and pharmaceuticals.

Booklet on Vitamin B_6

Hoffmann-La Roche Inc., Nutley 10, N. J., has issued a 24-page dissertation on Pyridoxine (vitamin B_6). The booklet contains recent nutritional and clinical data with a brief review of the chronology, chemistry, pharmacy, and occurrence of the vitamin in nature.

Hexachlorophene

Sindar Corporation, 330 West 42 St., New York 36, has issued a supplemental bibliography of articles on Hexachlorophene in the Sindar Reporter No. 2—1954. This contains abstracts of articles which have appeared since the publication of Sindar's Technical Bulletin H-1 of May, 1952. This is the second supplement, the first having been published in Sindar Reporter No. 4—1953.

Bulletin on Morpholine

Jefferson Chemical Company, 260 Madison Ave., New York 16, has available a 44-page bulletin on Morpholine. This chemical and its derivatives are used as emulsifiers, bactericides, herbicides, fungicides, solvents, anesthetics, dyes, pharmaceuticals, and as gelling, wetting, softening, and separating agents, among other uses.

Popper Pharmaceutical Equipment

Popper & Sons, 300 Fourth Ave., New York, has issued catalog No. 454, covering their entire line of PerfeKtum pharmaceutical equipment. Included are illustrations and descriptions of 10 machines previously not available in catalog form.

Punches and Dies

F. J. Stokes Machine Company, 5500 Tabor Road, Philadelphia 20, has issued a 12-page booklet entitled, "Some Things You Should Know About Punches and Dies," which should be of real interest and help to users.

Bulletin on Carbopol

B. F. Goodrich Chemical Company, Rose Building, Cleveland 15, Ohio, has issued a 12-page bulletin on Carbopol 934, which is described as a new unique water-sensitive gun designed to meet the need for a synthetic gel-forming material upon which the cosmetic, pharmaceutical and related compounding industries can rely for performance, reproductibility, and versatility.

Demineralizers

Graver Water Conditioning Company, 216 West 14 St., New York 11, has issued a 20-page booklet on demineralizers. The principle of demineralization is given and is well illustrated with photographs and drawings.

Vacuum-Filling Machines

Perl Machine Manufacturing Company, 68 Jay St., Brooklyn 1, N. Y., has issued a new 4-page circular describing different types of vacuum filling machines.

D&O Booklet

Dodge & Olcott, Inc., 180 Varick St., New York 14, has issued a 20-page booklet entitled, "How the D. & O. Laboratories Serve You." The booklet is profusely illustrated.

Foster D. Snell Booklet

Foster D. Snell, Inc., 29 West 15 St., New York 11, has issued an 8-page booklet describing the analytical services of the firm.

U.S.I. Sun Screen

U. S. Industrial Chemicals Co., 120 Broadway, New York 5, has issued a Bulletin on its chemical sun screen, H-124S. The bulletin covers application of the compound as a stabilizer for foods, and a chart shows its ultraviolet transmission.

Brothers Chem. Catalogue

Brothers Chemical Co., Orange, N. J., has issued Fine Organic Chemicals Catalog No. 9—a 96-page booklet giving information on over 2,000 chemicals.

NEOMYCIN SULFATE

FOR TOPICAL USE — **FOR INTESTINAL USE**

- Powerful Antibacterial Action
- Broad Spectrum
- Low Bacterial Resistance
- Low Patient Sensitization
- High Chemical Stability
- Negligible Absorption from Intestine
- No Toxic Effects from Oral Use
- High Intestinal Concentration
- No Interference with Wound Healing

We offer bulk Neomycin Sulfate as a sterile powder and non-sterile bulk as powder or micromilled.

ANTIBIOTICS

Neomycin
Penicillin
Streptomycin
Dihydrostreptomycin

VITAMINS

B_1—Thiamine HCl U.S.P.
B_{12} Crystalline U.S.P. (Cyanocobalamin)
0.1% Trituration with Calcium Phosphate Dibasic
0.1% Trituration with Mannitol
B_{12} Solids for Oral Preparations
Calcium Pantothenate (Dextro)
Choline Bitartrate
Choline Chloride
Choline Dihydrogen Citrate
Tricholine Citrate
†Folic Acid U.S.P.
Nicotinamide U.S.P.
Nicotinamide HCl
Nicotinic Acid U.S.P.
Pyridoxine HCl
Riboflavin U.S.P.

†First synthesized by Cyanamid . . . highest quality available.

SULFONAMIDES

Sulfadiazine U.S.P.** . . . Sulfa Drug of Choice
Sulfamerazine U.S.P.**
Sulfanilamide U.S.P.
Sulfathiazole U.S.P.**
Sulfapyridine N.F.**
Sulfabenzamide**
Sulfaguanidine U.S.P.
Sulfamethazine (for human use)
Sulfacetamide**
Phthalylsulfacetamide

OTHER PRODUCTS

Aminoacetic Acid N.F.
Bishydroxycoumarin U.S.P.
Cinchophen N.F.**
Neocinchophen U.S.P.
Heparin Sodium U.S.P.
Methylene Blue N.F.
N-acetyl-p-aminophenol
Para-Aminosalicylic Acid***
Propylthiouracil U.S.P.
Metallic Stearates—AERO* brand
Certified Colors for Pharmaceutical Use

VETERINARY PRODUCTS

2-Amino-5-Nitrothiazole
Phenothiazine N.F. (regular and drench grades for veterinary use) (also sulfas above)

*Trade-Mark
**and sodium salt
***with sodium or calcium salt

In keeping with long-established policy, the above products are offered to ethical Pharmaceutical and Veterinary Manufacturers only.

American Cyanamid Company

FINE CHEMICALS DIVISION
30 ROCKEFELLER PLAZA, NEW YORK 20, N. Y.

CHICAGO: 3505 NORTH KIMBALL AVE. (18) — DETROIT: 931 FISHER BUILDING (2)
PHILADELPHIA: 401 NORTH BROAD ST. (8) — LOS ANGELES: 2300 S. EASTERN AVE. (22)
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have your FLAVORS kept pace with modern drugs?

Many of today's drugs were unknown to medicine ten years ago. Have your flavors kept pace?

AROMATIC MIXTURES MM&R were developed in our laboratories to meet the highly specialized flavoring needs of the modern pharmaceutical industry. They disguise unpalatable drugs both old and new and emphasize the excellence of your products by imparting outstanding taste appeal.

The essential oils and other flavoring materials in Aromatic Mixtures MM&R are the finest obtainable and meet the most exacting requirements of the medical profession and the pharmaceutical industry.

MM&R chemists will be glad to suggest suitable flavors or to develop new ones to meet your special needs. No obligation, of course.

M M&R MAGNUS

MAGNUS, MABEE & REYNARD, INC.

Since 1895 • ONE OF THE WORLD'S GREATEST SUPPLIERS OF ESSENTIAL OILS, FLAVORS AND BASIC PERFUME MATERIALS

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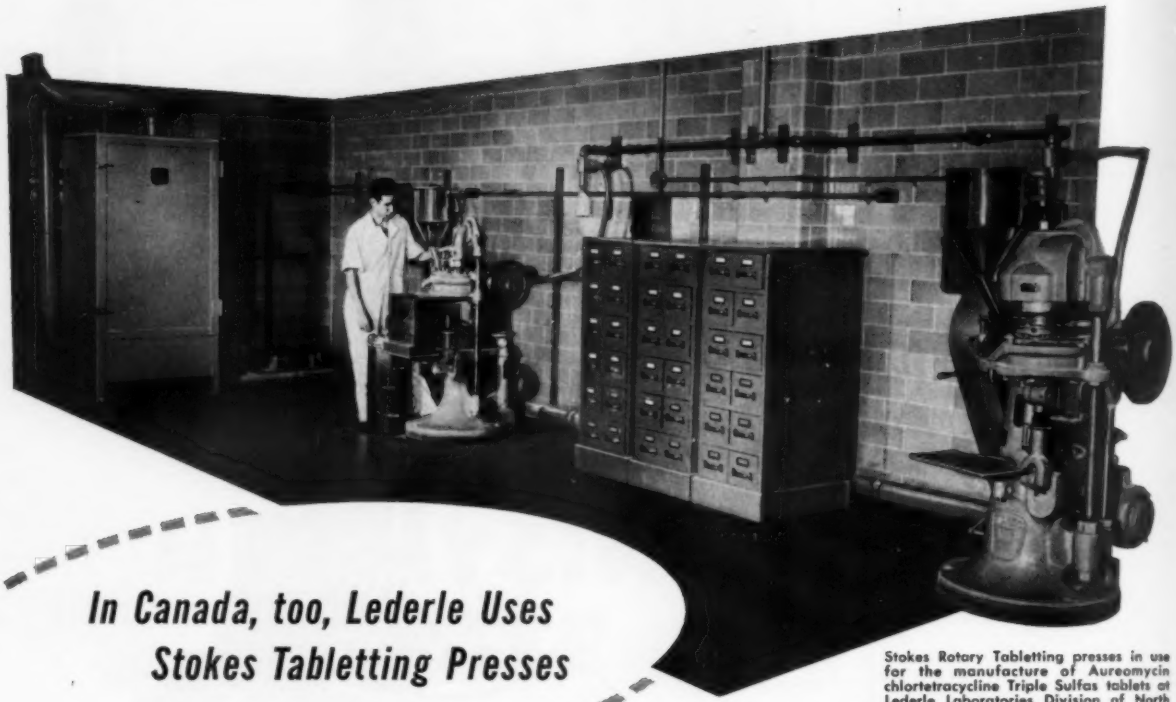


In Canada, too, Lederle Uses Stokes Tabletting Presses

Stokes Rotary Tabletting presses in use for the manufacture of Aureomycin chlortetracycline Triple Sulfas tablets at Lederle Laboratories Division of North American Cyanamid, Ltd., Montreal, P.Q. Stokes drying cabinet in background.

At the Lederle Laboratories Division of North American Cyanamid, Ltd., in Montreal, in a strikingly modern and efficient plant, Lederle Aureomycin chlortetracycline Triple Sulfas tablets are made. They are produced on Stokes rotary presses whose efficiency appropriately matches their modern surroundings. Artane trihexyphenidyl and Sulfonamide tablets are made on the same equipment.

It is their notable dependability which has long made Stokes presses popular throughout the world, often at points far removed from sources of parts or mechanical service.

The Lederle Laboratories Division of American Cyanamid Company at Pearl River, N.Y., also uses Stokes tabletting presses, both rotary and single-punch types, to make over 200 tabletted products.

Send for the booklet "How to Save Money on Punches and Dies" and for Catalog No. 801, "Stokes Tabletting Presses."

F. J. STOKES MACHINE COMPANY
PHILADELPHIA 20, PA.

STOKES

STOKES MAKES: High Vacuum Equipment, Vacuum Pumps and Gages / Industrial Tabletting, Powder Metal and Plastics Molding Presses / Pharmaceutical Equipment

Management Forum

by Francis Chilson

INDUSTRIAL CONSULTANT

Controllers

I thought my diatribe on Controllers would get a rise out of them. It came in the form of a copy of a speech, extolling the work of controllers during the past twenty years, made by a controller: Mr. C. M. Ahearn of the Colorado Fuel and Iron Co. The speech was sent us by the Controllers Institute of America. Only the last paragraphs are quoted. The italics are mine. See what I mean? It is something to boast of that a controller's department should be second in size to any operating division.

"And so it is 1953. In the past 20 years, many vexing and difficult problems were presented by our political, social and economic changes. The controllers of America have an enviable record of meeting and solving these problems quickly and easily. *The position of controller advanced immensely during this period to such an extent that one of the largest corporations of the United States calls attention to the fact that its Controller's Department is second in size to the Operating Divisions.*

"In order to recruit personnel to carry out the functions of controllership, the Controllers Institute of America, through its committees on education, has worked actively with professional organizations and with business colleges. In the future, there is no question but that the duties of controllership will require particular experience and educational qualifications *to recruit a vast field of properly trained personnel.*

"The Controllers Institute of America organized by a handful of pioneers has grown in stature and number, and in 1953 its membership totals 3,957."

Correction

When I make a blunder its a bloomer. In my recent commentary on uniting the principal drug trade associations I stated that Eaton Laboratories was not a member of the APMA. It is and I apologize to all Eatonians. Incidentally several people called my article a "bombshell" and said there'd be hell to pay over it. To date every comment I've heard and every letter I've received favors the idea. Many people expressed the thought that the association secretaries would from a selfish point of view oppose the idea. It surprised them, as it doubtless will you, that the idea was advanced to me two years ago by the executive secretary of one of the principal associations.

Thought for Today

Here lies the body of Judson Gray
Who died defending his right-of-way.
He was right—dead right—as he sped along,
But he's just as dead as if he'd been wrong.

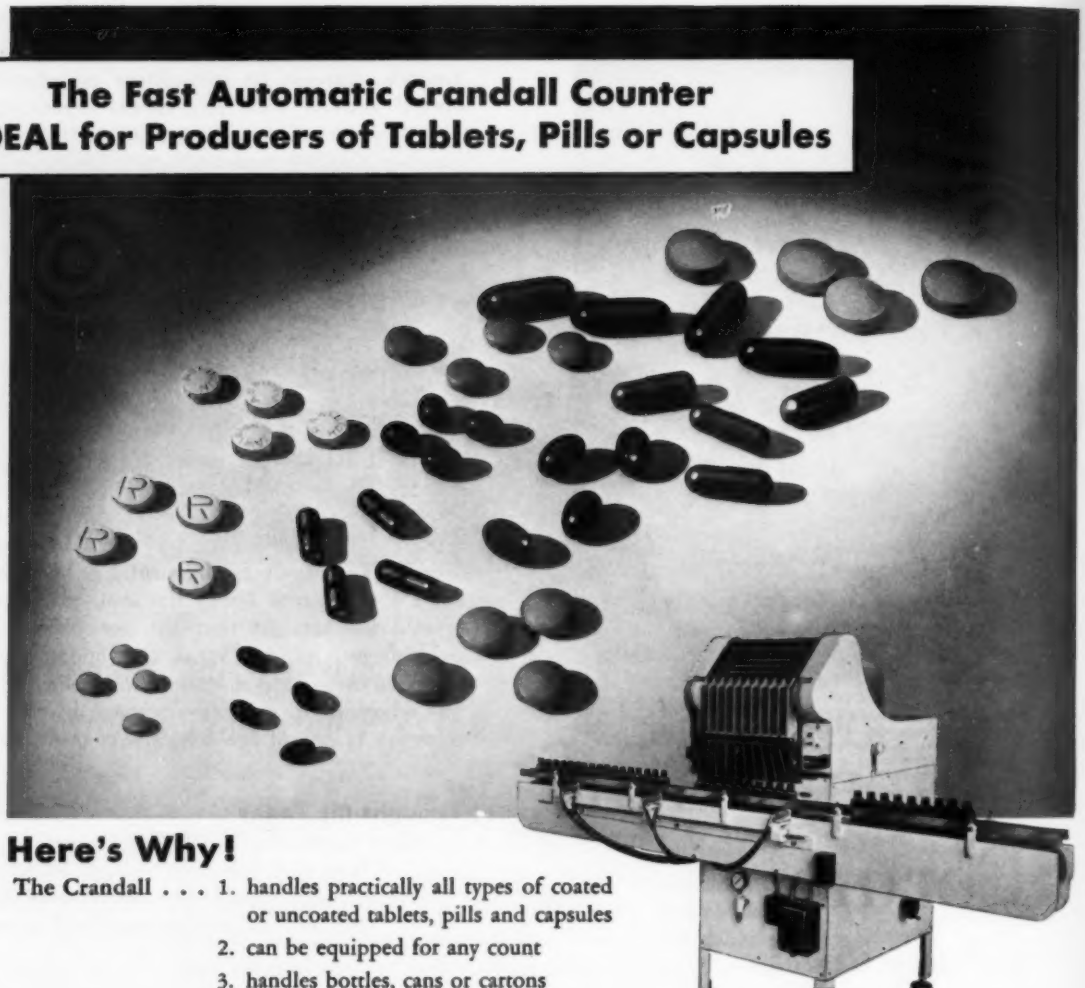
Sir John and the Lady

When I was in England some time back I told "Sir John" Walmsley that I wanted to meet some genuine lords and ladies. I wanted to see what the members of a privileged caste looked like. My desire presented no problem to "Sir John" who knows everybody in England from barflies to baronets. But he didn't think much of the idea. He said I should find most of them a bit dull if not stuffy, but anyway he invited me to spend a week-end at the country house of his uncle, the Earl of Twickenham. (John's family moniker incidentally is "Twigget"). The "house" was about the size of an armory and very easy to get lost in as I did early Sunday morning, hunting for a wee little room (which are rather more numerous in America than they are in England. But then the English like hunting). After scouting one corridor after another my wish was granted—in the matter of meeting ladies I mean:——

I met a LADY in the hall,
She had nothing on at all.
I said nothing, nor, did she;
We had not met yet,
Formally.

When it comes to protocol I can be as British as any of them even if I am a Yank.

The Fast Automatic Crandall Counter is IDEAL for Producers of Tablets, Pills or Capsules



Here's Why!

The Crandall . . .

1. handles practically all types of coated or uncoated tablets, pills and capsules
2. can be equipped for any count
3. handles bottles, cans or cartons
4. runs at speeds up to 60 bottles of 100-count per minute—faster where counts are lower
5. can be equipped for automatic or semi-automatic operation

The original Crandall Tablet Counting Machine is manufactured *only* by **US.**

. . . and here is an important added feature—

The Crandall can handle several different products simultaneously. By dividing the hopper, the Crandall can count several products at the same time. Thus, if you are making small volumes of a variety of products, you can set up the Crandall to suit your exact requirements with a minimum of effort.

Full details are yours for the asking. Write today.

U. S. AUTOMATIC BOX MACHINERY CO., INC.

Owning and Operating NATIONAL PACKAGING MACHINERY CO. ★ CARTONING MACHINERY CORP.

45 ARBORETUM ROAD, ROSLINDALE, BOSTON 31, MASS.

Branch Offices: New York ★ Chicago

Net and Gross Weighing
Package Forming and Filling
Carton Sealing, Lining,
Wrapping, Box Making

Annual Wage

The guaranteed annual wage is coming again to the forefront of industrial discussions. I cannot speak with first-hand knowledge of the problems of other industries but I can of the drug and cosmetic industry, hence, I fail to see why we haven't adopted this policy long ago. If we can't do it nobody can, for in these industries it must be admitted that production costs of most products are negligible in comparison with selling prices. As I pointed out before we always have had a guaranteed annual wage for office people. Such is the volume of records we must keep—or feel we must—that office people are seldom if ever laid off, regardless of business conditions. In most plants office workers outnumber production people by a considerable margin.

We of course could not guarantee an annual wage to seasonal workers who are required in great numbers especially by the cosmetic industry. But we could do so easily for our regular production people who have been employed long enough to be considered permanent workers. Why don't we do it?

Degrees

Every now and again college graduates are criticized by other college graduates as well as by non-college men, who as a rule are secretly envious of those who had had the privilege of a college education. A degree of course never conferred intelligence on anybody but I think in spite of all the criticism a bachelor's degree is as good an intelligence indicator as any we have. This is especially true for post-war graduates who have been selected and tutored under the operating maxim of most colleges—"Many are called but few are chosen." Nowadays colleges select their candidates and during the first couple of years about half of those selected are called out. The big industrial companies, which watch the graduating classes, use marks and degrees as indicators of individual ability. No better indicators have yet been found in spite of the fact that good marks and possession of a degree might in a few cases mean that the owner has merely a retentive memory. But not so much so in technical courses. A boy doesn't get a degree in chemistry or engineering nowadays without having a lot more than retentive memory. I think that possession of a primary degree is a mark of intelligence unquestionably. But this does not mean that I believe that possession of additional degrees means a greater degree of intelligence. The superior degree simply means more extended studies in particular fields. A few of the PhD's I know are dumb as hell. If they had to do their academic work over again under today's conditions they'd never get by.

We cannot, however, rely too much upon degrees alone. Two of the best plant managers I ever worked with had no college education at all. The best all-around mechanical engineer I ever met had not even graduated from grammar school. But these men are exceptions. They are highly intelligent men, widely read and learned in their professions. They have the native intelligence, the learning and the wisdom of experience even though they lack academic labels. It is unfortunate that using a degree as a yardstick we miss exceptional people. This country was built largely by men who wouldn't have known the meaning of the word "degree." But their time has passed and in our complex industrial society we must rely upon academic training.

Academic training is sketchy enough at best. I sometimes get infuriated by the fact that young graduates don't seem to know anything. Among other things they can't read, they can't write, they can't spell and they can't sell (another way of saying, they can't talk). Such deficiencies in the graduate's equipment are not however his fault. They are attributable to his school and its curriculum. Nevertheless the graduate of today is likely in spite of this criticism to have a pretty good grasp of his technical tools.

Packaging Material Manufacture

There are still some companies that make some of their own packaging material such as set-up boxes, folding cartons, collapsible tubes, cans and cannisters and particularly printed matter, labels and the like.

It has always been my belief that when all economic factors are carefully and accurately appraised no manufacturer of drug and cosmetic products can make any of his own packaging materials. I was going to add "excepting under certain exceptional conditions." (But we won't emphasize that because I've found that whenever I have investigated the subject, the manufacturer who favors such a policy always regards his circumstances as exceptional regardless of what the circumstances are.)

I had an opportunity recently to investigate the manufacturer of set-up boxes by a client who was devoting almost a third of his operating space to this operation. Right off the bat I was confronted with dogma number one: "if we didn't make our own set-up boxes we couldn't begin to store our monthly requirements in the space now allotted to box manufacture." Funny how prejudices are often asserted as facts. I had the production planning people compute the cubic storage capacity required for a full two months' stock at peak load, allowing forty per cent space wastage for access aisles. The result was amazing to the management although typical: two months' stock of boxes could have been stored in exactly one-third the space now alloted to box manufacture and the storage of component parts.

In this instance I checked with two other manufacturers who still are making their own set-up boxes and both said the same thing: "If we didn't make our own boxes we wouldn't have room enough to store our requirements."

Everybody apparently thinks of the cubic storage space required by the finished set up box and relates that in his own mind to the storage space required by flat paper stock.

Always a CLEAN ACCURATE fill

WITH STOKES & SMITH
MODERN FILLING MACHINES

View of the S & S HG-84 Automatic Heavy Duty Duplex Filler at Avon Products, Incorporated, *Suffern New York*

Whatever your product, profits begin with accurate filling. You can maintain this vital accuracy in your operations with S & S Filling equipment. There is an S & S Filler for most every product; paste, granular substance or powder. Prompt attention will be given to your request for complete information.

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Pacific Coast: SIMPLEX PACKAGING MACHINERY INC., 534 23rd AVE., OAKLAND 6, CALIF.

fmc
SUBSIDIARY OF FOOD MACHINERY AND CHEMICAL CORPORATION
TRADE MARK

They forget that once the body of the box has been made up in the course of manufacture it requires as much cubic storage space as it does when completed regardless of where it is. But in the course of manufacture the air space all around that box-in-process is being wasted just as the air space over the box-making machines and over the working aisles beside them is also being wasted. They forget also that a set-up box has two or more component parts, to store which during process of manufacture, requires space. Even when the paper stock is in the raw or flat stage cubic space is wasted because skids of paper stock are so heavy that in the average plant floor capacity will not permit stacking but one skid or pallet high. Hence all of the upper air space is wasted.

Space requirement for a box shop operation breaks down about as follows. This is predicated upon efficient operation and direct feed of finished boxes to packaging lines. If you follow me carefully you will observe that the air space cannot be utilized in any division of the box shop until we come to finished box storage.

Flat paper stock storage—cutting and scoring—cut paper stock storage—corner staying, bodies and covers separately (machines and access aisles required)—labeling or finishing—bodies and covers separately (machines and access aisles required)—assembly of bodies covers and decks (conveyor belts and access or working aisles required)—in process storage of finished boxes. Now that we've walked through the plant it is obvious that a couple of pieces of flat paper stock will require a hell of a lot of floor and cubic space before emerging as finished set-up boxes.

Understanding

I sometimes wonder if complete comprehension is possible between human beings. There are times when I think that people look and listen but neither see nor hear. On several occasions I have drawn master plans for plant site development, dividing up the total area into related categories, such as warehousing, manufacture and packaging, offices, laboratories, personnel services, plant services (power parking lots, tank farms and out-of-door features), isolation activities such as the manufacture of noxious, dangerous or noisome substances. Everybody agrees with the logic of these divisions. Everybody cooperates in the development of the master plan. Everybody apparently understands it. And the first damn time an expansion is made it is put in the wrong place—always for a trivial or senseless reason. Sometimes I happen along in time to spike the project and prevent a gross error from being made. Sometimes the blunder is made after I no longer am associated with the company. Conditions do change of course but principles do not.

Recently one of my clients bought another company just after completing a new plant project for which I had drawn the plans. The new company makes a product that is obnoxious because of a fume condition and besides a very considerable effluent disposal problem is involved.

Obviously such an operation should be placed in the isolation area reserved on the master plan for such operations. But where do you suppose the plant manager recommended putting it? Right against the west wall of the new plant thus completely cutting off the possible future expansion of the main plant in that direction. His reasons? Putting the new plant as he suggested would save the construction cost of one wall, by using the existing wall of the main plant. Also he would save the expense of lengthening the siding! Total savings not more than $10,000 in a project requiring the investment of half a million! Is it any wonder that I blew up?

"Phogonotomy"

Removal of the beard with a razor.—Webster.

A. N. Whitehead

"Intelligence is quickness to apprehend as distinct from ability, which is capacity to act wisely on the thing apprehended. The vitality of thought is in adventure. Ideas won't keep. Something must be done about them."

Mort Cooper

If the advertising agencies in this country had any sense they'd hire Mort Cooper to write their copy for them. As you can see from the accompanying illustration Mort's copy would not be dull. Mort operates

EVEN INVALIDS CAN LIFT OUR BED PANS

We can guarantee you a surprise. You'll get it the first time you lift a Cooper Hardware Bed Pan.

Only half as heavy as ordinary Bed Pans yet strong enough to last as long as you talk about your operation.

It has no joints, wood screws, nails, glue or dowels. Even your imagination cannot make it slippery.

Giving off no anesthetic gases your elbows don't scratch so much after the third day. Patients with patience put the doctors to bed. With many hip-gaskets they are sound proof and a blessing to obese patients.

Have Your Nurse Contact

Cooper Hardware Co.

Oxford, N. Y. Dial 8-2251

"Everything from Bed Pans to Bread Pans"

"The NEW Installations are COLTON"

COLTON TABLETING EQUIPMENT AT GOLD LEAF PHARMACAL

"Four years ago we expanded our tableting facilities and purchased the new Colton No. 216 Rotary Tableting Press.

Subsequently, . . . we purchased three more and have been more than delighted with their operation.

Compared with other presses which we have, your No. 216 Rotary Tablet Press handles many jobs which we were unable to handle previously—and, with a 50% increase in productive capacity. (Up to 900 tablets a minute.)

They are very economical to run and very rugged in taking abuse. Also, we are very pleased with the field service which we receive from your company. On many occasions we had to have punches and dies or replacement parts on short notice and got them without delay."

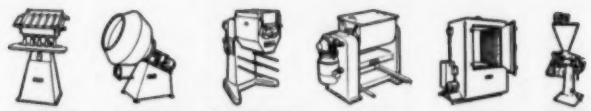
M. Gold, Vice-President

In a business involving many products, Colton small machines are better than big ones because of flexibility, versatility, high speed, early amortization of all costs.

ARTHUR COLTON COMPANY

DIVISION SNYDER TOOL & ENGINEERING COMPANY
3486 E. LAFAYETTE • DETROIT 7, MICHIGAN

PLANT NO. 2—500 BELLEVUE, DETROIT • PLANT NO. 3—MANCELONA, MICHIGAN
Sales and Service Engineers Coast-to-Coast
Export Office—13 E. 40th St., New York City
Offices in Principal Cities Throughout the World
Specialists in Pharmaceutical and Packaging Machinery for Nearly 70 Years



TABLET COUNTERS · COATING STANDS · GRANULATORS · MIXERS · OVENS · TUBE FILLERS

a hardware store near Norwich, N. Y. It's more than a hardware store near Norwich, N. Y. It's an anything-you-want store. Mort will sell you fishing tackle and the fish to go with it. He has a pool in the basement stocked with trout, so that when Mort tells you his bait will catch fish, he takes you down into the cellar and proves it. Mort operates the last and only boot-jack making establishment in the U.S. He's quite a guy. This ad incidentally appeared in the Norwich Sun on which my son, Greg is a reporter. Norwich, N. Y., is famous also for Pepto-Bismol and Unguentine.

Field Research

My agents have reported Fasteeth Coughlin (Lord Plushbottom) prowling around the bazaars of Bombay. You can expect trouble any day now in India. Look what happened in Africa after Crosby Coughlin and his red-headed cohort, Don German, finished their last safari. Crosby is hell on the personal touch in research. He likes to collect his own data. As a result of his invasion of Darkest Africa he is publishing a paper in the Journal of the American Physiological Society entitled, "Structure of the Mammary Grands of African Aborigines." It's easy to see the relation between Fasteeth and mammary glands. But it seems to me that research data could be collected a little less expensively and a little less thoroughly. In research there is such a thing as being too thorough. You saw what happened in Africa after Crosby pulled out. The Mau Mau. Obvious cause and effect. If you study that name it is easy to believe that the natives might have heard Crosby saying it. But what did he do in India? Collect Saris? I wouldn't be surprised some day to hear that Crosby is in China. His curiosity is insatiable. Getting behind the bamboo curtain would present no problem—not to Lord Plushbottom.

Far From the Madding Crowd

When I decided to move my office to my home in East Chatham, New York, one hundred and fifty miles from New York City, all my friends said I was nuts. I'd lose all my contacts. People would think I'd retired. I wouldn't get any more business. In short I was a damn fool to give up a New York address which I had had for almost twenty years. Well, I like the country, so in spite of all the advice to the contrary I moved anyway.

The result? Four years have passed—the four busiest years I have ever had. If I had taken all the business offered me I'd have to have had a staff of at least fifty engineers. Here in the woods I have the best train service imaginable. The New England States Limited stops to pick me up when I wish to go West, hence, I save eight hours traveling time on every round trip to Chicago. When I travel to distant points I can get, at the Albany airport twenty-five miles away, all the major airlines. When I come home from a trip I don't have to commute into New York to catch up on my office work as I did when I lived in Scarsdale and had my office on Park Avenue. There are other benefits too. From my office window as I write this I can see out across the blossom-laden orchard to the rolling, distant hills with no human habitation obstructing the view. The other night I was sitting here going over some mail, and, when I looked out into the moonlit orchard, there were fifteen deer grazing under the apple trees. So, maybe I am nuts to have come here but I like it.

As a matter of fact there is a general trek of business to the country. For several years past research organizations have been buying up big old estates in Westchester County, New York, and converting them into research centers. It is a good idea to get research men out of the omnipresent tensions of city locations. And besides these big old estates are cheap.

Now the offices of many big companies are being moved to the country. General Foods has established a huge office center near White Plains about twenty-five miles from New York. Several other equally large firms have done the same thing. Maybe all these firms are nuts too but I don't think so.

The following information is supplied by manufacturers of the equipment described and claims made below by these manufacturers are passed along for what they are worth. Presentation of such notice in this department is not to be taken as endorsement of the claims or of the equipment.

Heavy Duty Tablet Press

A new heavy duty tablet press with a completely enclosed operating mechanism that is triple sealed against powder and dirt contamination has been developed by the Kux Machine Co., 6725 N. Ridge avenue, a leading maker of die casting machines and tablet presses.

Entirely different in appearance because of the fully automatic self-lubricating enclosed mechanism, the press, known as the Kux Big 4 series, is available with pressures ranging from 30 to 500 tons. Operated either by mechanical or hydraulic power, the largest models are capable of forming 10 tablets per minute 15 inches in diameter and 10 inches thick.

The press produces solid compacts, normally called tablets in the trade, from powdered or granulated materials, including ceramics, pharmaceuticals, metals in powder form, salt, plastics and a variety of other materials.

The press, first of its kind made with totally enclosed mechanism, has both upper and lower punch pressure, which assures uniform structure and high density in the tablet being formed. Completely automatic in operation, the supply hopper only needs an occasional filling of material. The die fill has handwheel adjustments, and the pressure stroke can be adjusted by a visual indicating scale.

According to Kux, enclosing the mechanism of the press reduces maintenance costs to a minimum since the abrasive and corroding action of the materials used can not reach the moving parts.

New Volumetric Attachment

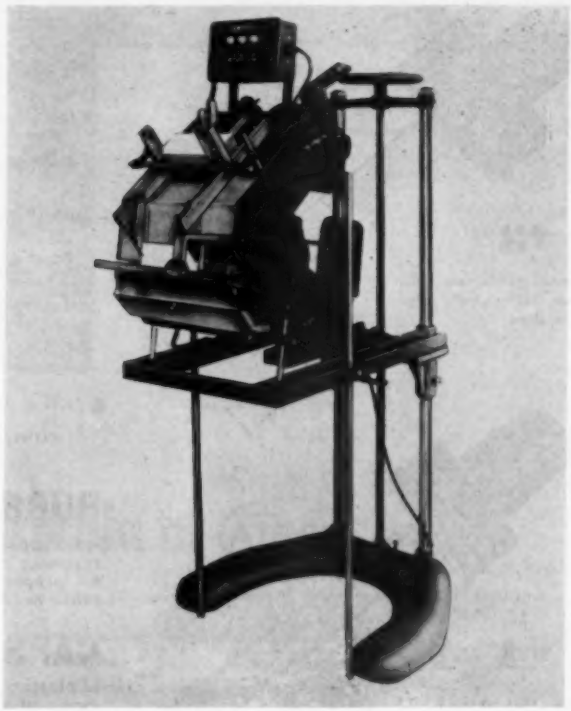
The MRM Company, Inc., 191 Berry St., Brooklyn, N. Y., manufacturer of liquid filling machines, has developed a volumetric attachment which can be installed on any liquid filling machine. The attachment is accurate in filling at high speeds to within a tolerance of plus or minus one gram.

The unit is ideal for filling aerosol containers. Since the attachment permits extremely accurate measurement of the material in the fill, absolute control of the amount of propellant used is established, thus preventing waste or misuse of these expensive gases. Developed originally for a prominent manufacturer of a hair shampoo, MRM Co. now has perfected the unit so that it can be installed on all liquid filling equipment, gravity, vacuum or volumetric.

The unit consists of special type filling heads, which are adjustable for variation of fill by means of a specially threaded cylinder to a tolerance of one gram, plus or minus, per each cylinder revolution. These receptacles become part of the filling operation and it is they which are first filled through a special valve to the specified amount for each container. At this point they are discharged automatically into the containers.

Amsco Sealer with Floor Stand

The Amsco Automatic Hi-Speed Jaw Bag Sealer, manufactured by Amsco Packaging Machinery, Inc., 31-31 48th Avenue, Long Island City 1, features an adjustable floor stand enabling the machine to be set along side existing conveyor systems without cumbersome installations. Operated by a hand crank the unit can be raised or lowered to suit bags of different heights when it is conveyor fed. Labelling and sealing are done in a single simple operation in the Amsco machine. Perfect sealing throughout the width of the bag is guaranteed by a highly sensitive adjustable dial-type thermostat which automatically controls the heat. The heating element, cartridge-type and hermetically sealed, is set within two crimp sealing jaws. Standard dimensions are 1½" wide by 12" long, with other size sealing surfaces available on request.



Vacuum Filling Machine

Scientific Filter Co., 68A Rose St., New York, has redesigned the straight line semi-automatic vacuum filling machine to reduce floor space and weight and thus permit it to be easily moved about the plant to any point where bottling is to be performed. Two men, one at each end, can readily move the machine; or, it can be furnished on casters for one man handling.

Operation is simple: Empty containers are moved along the stationary track to an adjustable stop which automatically centers them under the filling spouts. These spouts are mounted in a slotted head assembly to provide lateral adjustment for bottles of various sizes. Vertical adjustment is also provided via hand wheels holding the main assembly on two upright rods.

Only a slight pressure on a hand lever is required to move the filling spouts downward into the containers at which time sponge rubber gaskets on each spout seals the containers.

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Non-rolling, extra-depth, Bakelite cap; thick-flange rubber bulb; Saftee-ball glass.

#3

Regular plastic cap; thin flange rubber bulb; semi-blunt glass.

#4

Metal cap; AMEKINE oil-resisting synthetic rubber bulb; blunt glass.

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RUBBER BULBS

are supplied in many styles and colors. Oil-resisting AMEKINE synthetic rubber is used for oil preparations; natural rubber is supplied for other products.

CAPS

of plastic or metal, can be furnished in a complete range of sizes and colors.

DROPPER GLASSES

are available in a wide variety of styles and sizes. Plain or CALIBRATED in any color to mark specific dosages.

BOTTLES

in an attractive modernistic style in Amber, Blue, Green or Clear glass, are available, complete with dropping parts, in the following sizes: 2cc, ⅛, ¼, ½, 1 and 2 oz.

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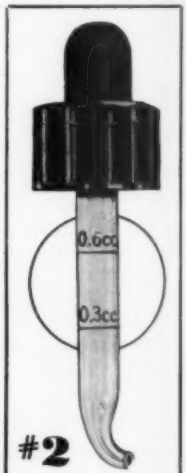

#2

Non-rolling extra-depth Bakelite cap; thick flange rubber bulb; CALIBRATED special bent glass.

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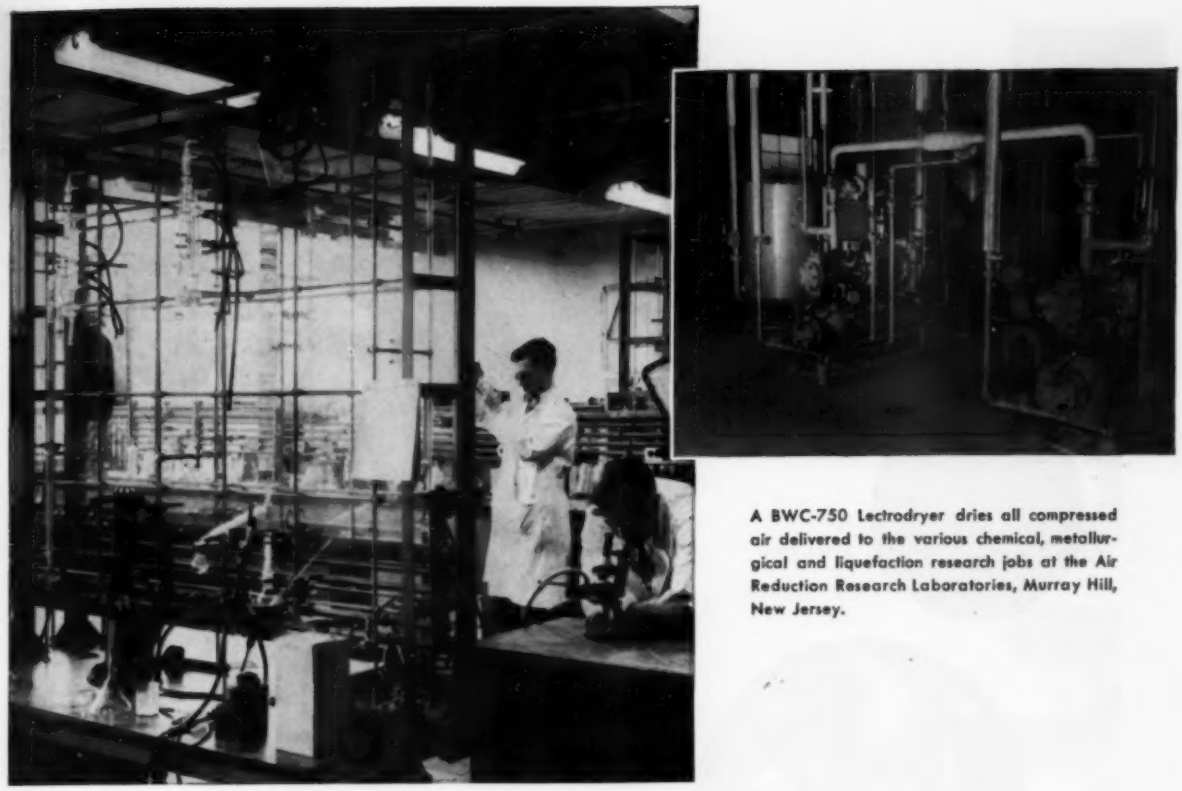

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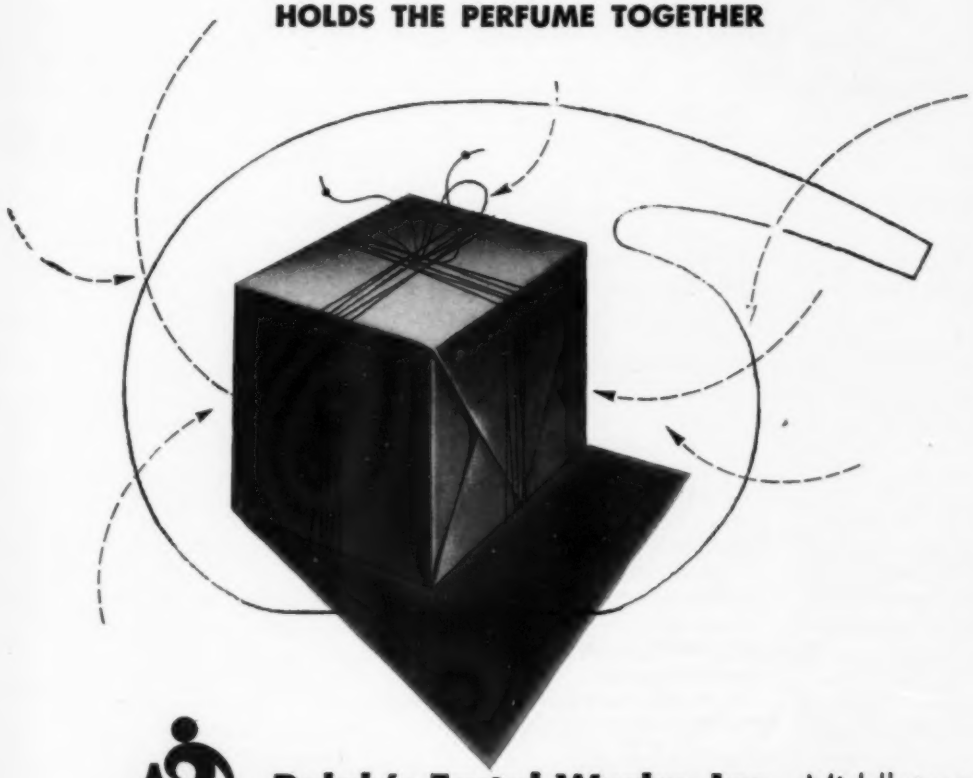

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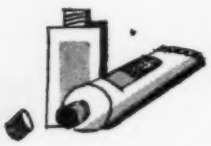

Advancing Therapy

Alopecia Areata

An increasing frequency of alopecia areata has prompted the study reported by N. Tobias (*Postgrad. Med.* 15:50, 1954). The disease is a patchy alopecia of unknown origin which appears suddenly, produces varying degrees of embarrassment and psychic trauma, and follows a capricious course. In a clinical study of 123 cases, of which 73 were followed, several interesting facts were obtained regarding clinical characteristics, predisposing factors, course and response to treatment. Both sexes are about equally affected, although women are more apt to seek medical attention, even if the lesion is the size of a dime. Men, as a rule, are more worried if the lesions appear on the bearded area. In the present series 56 patients were males and 64 females. The youngest patient was three and the oldest 73 years of age, with the majority less than 40 years old.

While the actual cause of alopecia areata is unknown, various trigger factors appear to have some effect on the neurovascular mechanism of the hair papillae. Definite psychosomatic factors were present in 36 per cent of Tobias' cases, including business worries, serious injuries or operations in members of the families, pending divorce suits, strain preceding school examinations, and the like. In only three cases was there a history of acute febrile disorders. In 11 cases there was an association with pregnancy, five occuring during the last trimester and six during the post-partum period. Tobias has not observed enough cases occurring during pregnancy to be impressed that an endocrine factor is operative. The relapse rate was higher in the neurotic type of patient. If no regrowth occurs after a year, prognosis is poor. Alopecia areata of the bearded area and of the forearms required three times as long for regrowth to occur as did that of the scalp. Alopecia areata occurring before puberty may develop into the totalis type.

While hair growth may occur spontaneously, Tobias feels that local and general therapy hastens regrowth. Although there is no specific treatment, the following procedures may stimulate the return of hair, prevent further loss and improve the patient's morale:

1. *Physiotherapy.* Erythema doses of ultra-violet light or spot quartz, once a week to the affected area. In resistant cases, one worker has found thorium-X ointment or varnish useful.

2. *Cryotherapy.* Production of erythema by use of solid carbon dioxide snow or slush.

3. *Local irritants.* Any rubefacient which produces local irritation will cause local hyperemia and hasten physiologic regrowth of hair. Tobias' preference is phenol-alcohol, Cutler's solution or seven per cent tincture of iodine.

4. *Amino acid therapy.* Supply amino acids containing cystine.

5. *Diet.* Foods containing cystine.

6. *Vascular dilation.* This can be produced by estrogens or acetylcholine iontophoresis.

7. *Vitamin therapy.* Vitamin A in doses of 150,000 units daily.

8. *Psychotherapy.* In all cases the physician should improve the patient's morale by being hopeful and by encouraging him to return once a week for treatment until there is evidence of hair growth. If the patient is definitely depressed or if the alopecia cannot be hidden, a wig or transformation should be advised.

9. *Propyl thiouracil.* This has been used in cases in which the metabolic rate is elevated.

10. *Sedative drugs* such as Donnatol or Barbidonna may be useful in the worried type of patient.

11. *Corticotropin.* In those cases in which there is no response to local or general therapy after a month, a course of cortisone may stimulate hair growth. In the alopecia totalis type, the effect of this hormone has unfortunately been only temporary, although it appears that one or more of the adrenal corticosteroids have an important bearing on hair growth.

Tobias has found general ultraviolet radiation to the scalp and phenol-alcohol applied to the patches once a week satisfactory in the average case. In this procedure, liquid phenol is applied to the patch until it turns white, and is immediately neutralized with alcohol. When there is no evidence of hair growth after three months, other measures are advisable.

Evaluation of Carbomycin

In an evaluation of carbomycin (Magnamycin), W. W. Field and G. Taylor (*Antibiot. & Chemotherapy* 4:65, 1954) found that this new antibiotic in the doses given proved to be an effective and satisfactory antibiotic agent in the treatment of infections due to the presence of gram-positive organisms. Of 28 cases of pneumococcal pneumonia, 20 responded satisfactorily with either 0.5 Gm. every six hours or 1.0 Gm. initially and 0.25 or 0.30 Gm. every six hours. Pre-existing pulmonary disease limited the effectiveness of the drug. *E. coli* in the urinary tract was highly resistant to carbomycin. β-hemolytic streptococcus was sensitive to carbomycin, but the drug failed to rid the pharynx of the organism in one out of two cases even after prolonged administration. An abscess of the buttock, caused by a strain of *M. pyogenes* var. *aureus* resistant to penicillin, responded to carbomycin. Friedlander's bacillus was highly resistant to carbomycin, and no clinical improvement was noted with

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its use. Erysipelas cleared promptly with carbomycin.

Two out of 36 patients developed toxic side-effects with carbomycin. They were mild and subsided rapidly when the drug was discontinued.

Sensitivity tests revealed that *in vitro* the gram-positive organisms were sensitive to the action of carbomycin.

Terramycin-Polymyxin Ointment

According to B. Appel (*Antibiot. & Chemotherapy* 3:1258, 1953) a topical ointment containing three per cent of oxytetracycline hydrochloride (Terramycin) with 0.1 per cent of polymyxin sulfate B has been used in over 200 cases of skin infections with unusually favorable and prompt results in a number of conditions. Not one case of irritation or sensitization was encountered, even though the patients were in the widest range of age from infancy on. The ointment was prescribed to be used in the usual and ordinary manner by applying it to the affected areas three times a day. If the condition was excessively crusted, the crusts were to be washed off with one of the usual dermatologic type of soapless detergents. No unusual ritual was required, and no other supplementary treatment was used. The effectiveness was most striking in the pyogenic dermatoses; 21 cases of impetigo, 18 cases of folliculitis, 54 cases of impetiginized dermatoses (including 10 cases of neurodermatitis), 20 cases of dermatitis venenata, eight cases of seborrheic dermatitis, 4 cases of hypostatic dermatitis and varicose ulcer, and 12 miscellaneous dermatoses. Five cases of otitis externa, which ranged in duration from one to five months, cleared up in from three to five days. Five cases of acne necrotica miliaris of the scalp, which ranged in duration from five months to three years, cleared up in from three to eight weeks.

The superinfection of the impetiginized dermatoses responded to the treatment; the underlying dermatoses themselves were not usually affected. The value of the treatment lay in the promptness with which the superinfection was brought under control, plus the safety and freedom from irritation of the underlying condition. Among a number of conditions in which the treatment was ineffective, two cases of pyogenic granuloma and six cases of chronic pustular acrodermatitis (pustular psoriasis) are worthy of mention. The latter are known to give sterile cultures for bacteria; the former have already produced a mass of vascular granulation tissue.

Appel points out that no attempt has been made to determine whether the effectiveness of this combination is because these two drugs are synergistic, additive or merely supplementary to each other. The combination is safe and effective.

Antibiotics for Amebiasis

A composite evaluation of the amebacidal efficiency of the antibiotics has been attempted by G. McHardy and W. W. Frye (*J. A. M. A.* 154:646, 1954). They found that of the broad-spectrum antibiotics, oxytetracycline (Terramycin) is the drug of choice in the management of intestinal amebiasis. Chlortetracycline (Aureomycin) is less efficient. Fumagillin (Fumadil), obviously a direct-acting antibiotic because of its restricted bacterial spectrum, is an efficient amebacidal substance. There is some evidence that combined therapy may be more efficient than any antibiotic alone because of the distinct difference in mode of action and the depicted therapeutic limitation. Hepatitis, hepatic abscess, and other extracolonic amebic involvements are not benefited by treatment with the antibiotics evaluated.

Oral Procaine for Pruritus

One hundred forty-five patients representing 23 pruritic dermatoses were treated by L. G. Beinhauer (*Arch. Derm. & Syphil.* 69:188, 1954) with orally administered capsules containing 250 mg. of powdered procaine hydrochloride and 150 mg. of granular ascorbic acid for the relief of pruritus. Reactions occurred in 12 patients (8.2 per cent) and were minor, consisting of headache, dizziness, nausea, drowsiness, and vomiting. These were readily controlled by withdrawal of the drug and did not recur upon readministration. In patients in whom response was favorable, relief was forthcoming within four days after treatment was begun. No evidence of adverse systemic effects was noted when the drug was given over long period of time. Oral procaine therapy was found to give complete relief in 22.2 per cent of the patients, temporary relief in 27.9 per cent, and failure in 49.9 per cent. Oral procaine hydrochloride-ascorbic acid medication gave most effective response in the treatment of urticaria (penicillin), herpes zoster, and burning tongue. Generally speaking, the effectiveness of orally administered procaine for the control of pruritus did not exceed that of other recognized therapies prescribed for the same purpose in similar dermatoses. Procaine can be administered orally with safety and warrants a trial when other therapy fails.

Folic Acid and Iron Absorption

In the *Klinische Wochenschiefl* (31: 873, 1953), H. Begemann, W. Keiderling and F. Walter describe studies on healthy subjects and on persons with various disturbances that were designed to ascertain whether and under what conditions folic acid promotes the enteral absorption of iron. Iron was administered in the form of 200 mg. of ferrous sulfate. It was found that the increased absorption of iron that prevails in conditions of iron deficiency is further improved by the administration of folic acid. The absorption of iron was improved also in patients with gastric anacidity or subacidity, that is, in conditions in which the absorption of iron is greatly impaired. The tolerance for orally administered iron is greatly improved by the simultaneous administration of folic acid. The mode of action by which folic acid improves the resorption of iron, however, is not yet fully explained, but since it is known to promote the absorption of other substances, it is assumed that folic acid acts by modifying cellular permeability.

Piperphenamine for Hyperhidrosis

The use of a new anticholinergic agent for the control of hyperhidrosis and associated dermatoses has been reported by I. I. Lubowe (*New York State J. Med.* 53:2847, 1953). In his studies, the new drug, piperphenamine (5-methyl-4-phenyl-1-(piperidyl)-3-hexanol methobromide) was evaluated clinically in 40 cases of hyperhidrosis, miliaria, neurodermatitis, and other dermatoses associated with dysfunction of the sweat mechanism. Hyperhidrosis of the palms and soles can be effectively controlled by piperphenamine in therapeutic, nontoxic doses. Patients afflicted with dermatoses associated with disturbances of sweat mechanism are assisted to a more rapid recovery when piperphenamine is used in conjunction with routine dermatologic therapy. In comparison with the other anticholinergic compounds, its untoward effects are negligible.

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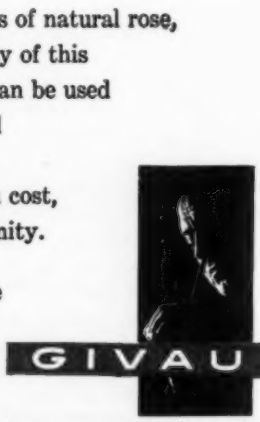

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Phenacetin Tablets

According to J. Faber (*Arch. Pharm. Chemi.* 60:682, 1953 through *Chem. Abstr.* 48:955, 1954) tablets containing phenacetin are difficult to compress because granulations dry out in the air. However, the following procedure gave good results: A mixture of 250 Gm. of phenacetin and 250 Gm. of acetylsalicylic acid was mixed with 1 Gm. of glycerine and 10 Gm. of 10 per cent gelatin in alcohol. To this was added a mixture containing:

Codeine phosphate	**10.0 Gm.**
Magnesium oxide	**87.5 Gm.**
Magnesium stearate	**2.5 Gm.**
Potato starch	**50.0 Gm.**

The entire mixture was sifted and air-dried for one-half hour before compression. It is stressed that the phenacetin and acetylsalicylic acid must be in crystalline form.

Hexachlorocyclohexane Emulsion

According to a note in *The Bulletin of the American Society of Hospital Pharmacists* (10:448, 1953), the following hexachlorocyclohexane emulsion is an efficient and apparently non-toxic cure for scabies and pediculosis:

Hexachlorocyclohexane, gamma isomer	**1.0 part**
Stearyl alcohol	**3.0 parts**
Cetyl alcohol	**2.0 "**
Cottonseed oil	**10.0 "**
Sodium lauryl sulfate	**0.5 part**
Polyethylene glycol 400 monolaurate	**1.0 "**
Water, to make	**100.0 parts**

Dissolve the hexachlorocyclohexane in the oil by heating gently on a water bath; add the cetyl and stearyl alcohol and heat to 70° C. Heat the distilled water to 70° C. in which the sodium lauryl sulfate and polyethylene glycol 400 monolaurate have been dissolved. Add this solution to the previously prepared solution, stirring rapidly until cool and homogenize. The emulsion can be made to conform to any desired thickness and viscosity by varying the amounts of cetyl and stearyl alcohol.

This emulsion is prompt-acting and is superior to the ointment in that it does not require the length of time to apply. It is believed that the lotion destroys the eggs as well as the parasites. It is stable at room temperature and with most compounds and it possesses the qualities of being washable and stainless. Dilute alkali, however, will render the hexachlorocyclohexane inactive by forming trichlorobenzene. Minimal toxic reactions to hexachlorocyclohexane can be treated with barbiturates.

Parenteral Nutrient Solution

In reporting on some unusual intravenous solutions, E. J. Anderson (*Chemist & Druggist* 161:175, 1954) states that a nutrient solution for parenteral feeding that has been used successfully is made from:

Amino acids	**50.0 Gm.**
Dextrose	**81.0 Gm.**
Potassium chloride	**0.5 Gm.**
Alcohol	**25.0 cc.**
Ascorbic acid	**25.0 mg.**
Aneurine hydrochloride	**2.0 mg.**
Riboflavin	**2.0 mg.**
Menaphthone bisulphite	**1.0 mg.**
Insulin	**8 units**
Penicilin	**4,000 "**
Water for injection, to make	**1,000 cc.**

The solution is sterilized by autoclaving, and the insulin and penicillin are added aseptically immediately before administration; four liters of the solution is given daily. It has a total calorific value of 2,100 calories, and provides physiologically balanced proportions of nutritional elements to be given parenterally to the patient who is unable to eat. The value of the alcohol in this preparation is that it provides additional calories without the use of extra dextrose, which would render the solution hypertonic and cause local reactions in the veins, as well as glycosuria, thus defeating the purpose for which it is given.

Expectorant Cherry Cough Syrup

The following compound cherry cough syrup, called Tri-Ceranol, is suggested by the Bureau of Professional Relations of the Florida College of Pharmacy:

Potassium guaiacolsulfonate	**4 Gm.**
Ammonium chloride	**5 Gm.**
Syrup acid hydriodic	**20 cc.**
Acid citric	**1 Gm.**
Syrup	**20 cc.**
Syrup cherry	**30 cc.**
Syrup wild cherry, to make	**120 cc.**

The dose is one drachm every two hours or as needed. If desired codeine sulfate or phosphate may be added.

Electrode Jelly

According to a note in the *Journal of the American Medical Association* (154: 460, 1954) an electrode jelly for use in electrocardiography can be made from:

Sodium chloride	**6½ lb.**
Pumice powder	**8 lb.**
Gum tragacanth	**8 oz.**
Potassium bitartrate	**4 oz.**
Glycerine	**24 oz.**
Carbolic acid	**1 oz.**
Water	**2 gal.**

The gum tragacanth and glycerine are heated in half the volume of water for six hours. The potassium bitartrate and sodium chloride are dissolved in the remaining volume of water and added. The resulting mixture is stirred thoroughly with an electric mixer and heated again for an hour. The carbolic acid and pumice are then added, together with more water if necessary, and the whole again mixed until of a creamy consistency.

No. 3 of a series

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In actual use a small quantity of the paste is rubbed briskly onto the desired skin area, leaving a small surplus to facilitate contact with the electrode. The patient usually notices a slight burning sensation, but none has complained of any pain or discomfort. While no instance of skin irritation from this paste has occurred in a large number of patients, the usual caution should be observed with anyone having extremely sensitive skin.

Mineral Oil Lotion

A formula for a stable, low-viscosity emulsion using mineral is given in the *Pharmaceutical Journal* (172:91, 1954), as follows:

Wool wax (high grade)	**2 Gm.**
Mineral oil	**50 cc.**
Sodium lauryl sulfate (90 per cent ester)	**2 Gm.**
Water	**50 cc.**

Dissolve the wax in the mineral oil and shake with the water in which the sodium lauryl sulfate has been dissolved. Emulsification is spontaneous, a shake or two is all that is required. If the wool wax is replaced by cetyl alcohol a viscous emulsion is formed. By using wool wax and cetyl alcohol in varying proportions (2 Gm. in all), emulsions of intermediate viscosity may be prepared.

With glyceryl monostearate an emulsion can be made to the following formula:

Glyceryl monostearate	**12 Gm.**
Light liquid paraffin	**20 Gm.**
White soft paraffin	**20 Gm.**
Water	**48 Gm.**

Mix and melt the components at 70°, stir until emulsified and cool.

Mix and melt the components at 70°, stir until emulsified and cool.

Therapeutic Chewing Gum

In Austrian patent 176,636 K. Redtenbacher and R. Trauner (through *Chem. Abstr.* 48:959, 1954) describe a therapeutic chewing gum. According to their specifications, the chewing gum mass contains, at least in its outer layers, abrading and mechanical polishing agents of a Mohs hardness of about two and a particle size of from 20 to 80 microns. The polishing materials may be calcium carbonate, calcium sulfate, calcium fluoride, calcium phosphite, bone meal, milled dental enamel or the like. Preferably, the chewing gum mass is sweetened only with synthetic sweetening agents and contains sodium benzoate as a preservative. A gum of this kind, it is claimed, is useful for the prevention of paradentosis and dental caries.

Surface-Active Agents for Drug Extraction

Surface-active agents, says E. Brochmann-Hanssen (*J. A. Ph. A.*, Scient. Ed. 43:27, 1954), have properties which would indicate that they might be of value in the extraction of crude drugs. His experiments, while not conclusive, give evidence that the addition of a synthetic surface-active agent to an aqueous menstruum will tend to increase the rate of extraction of an alkaloidal crude drug. The effect appears to be due mainly to solubilization and, in the case of cationic surface-active agents, to ion exchange. The surfactants are very readily adsorbed on the surface of the crude drugs. Their effectiveness as solubilizing agents is thereby greatly reduced, making it necessary to use rather high concentrations in order to obtain an appreciable effect. Alcoholic solutions of nonionic surface-active agents showed little or no increase in yield over that obtained with the solvent alone.

Anionic surface-active agents will precipitate alkaloids and are, therefore, not suitable for extraction of alkaloidal drugs, except possibly in high concentrations where solubilization of the precipitate takes place. Cationic surface-active agents in the form of salts with mineral acids show the best results. This is assumed to be due to ion exchange, resulting in the formation of highly soluble alkaloidal salts.

Press-Coating of Tablets

In a preliminary note in the *Pharmaceutical Journal* (172:85, 1954), R. C. Whitehouse describes a method for press-coating tablets as an alternative to the present method of pan-coating. To produce press-coated tablets he makes use of a rotary tablet press having a revolving die plate and upper and lower punches revolving coaxially with it. A layer of suitable coating material in the form of fine granules is fed into the die after lowering the bottom punch. The tablet to be coated (the "core tablet") is then inserted with a special feeding mechanism. A centering device has been designed that takes over after the core tablet has been fed into the machine and mechanically centers it. Then a further layer of coating granules is placed into the die on top of the core tablet. The core tablet and its coasting next pass between the pressure rolls on the machine and the coating is pressed on to the core tablet as a glossy, hard skin. The process can be carried out at a rate of 20,000 tablets an hour per machine.

The new press-coating method, says Whitehouse, has certain advantages over pan-coating. First, the mechanical abrasion and wear from tumbling is avoided. Moisture, as required with pan-coating syrups and the like, is obviated. Thus, if tablets that will disintegrate very easily are coated in the usual way and the moisture of the coating solution reaches the tablets they will start to disintegrate. However, as press-coating is entirely anhydrous, a tablet to be coated by that method may be formulated with the best possible disintegration properties. Furthermore, although tablets for pan-coating have to be pressed rather heavily to withstand the abrasion and wear, it is an advantage to compress a tablet for press-coating rather softer than usual, since coatings pressed on to such tablets bond into the surface of the tablet and form a very adherent coating.

Fine granules form the best coating composition, although powders may be used. Coatings may consist largely of sugar as in the pan-coated tablets, or they may be entirely composed of chalk and saccharin with talc, gum and stearates. The color may be applied in one operation. Additional coatings containing active drugs may be provided to present otherwise incompatible substances in a single tablet, or for other special effects. For example, the coating can be embossed or engraved with a distinctive mark or design, an operation that is not possible in pan-coating.

Calamine Liniment Replacement

According to G. L. Phillips (*Bull. Am. Soc. Hosp. Pharm.* 10:449, 1953) the following formula is now being used extensively at the University of Michigan hospital in place of calamine liniment:

Burow's solution	**4.8 cc.**
Zinc oxide	**10.0 Gm.**
Talcum	**10.0 Gm.**
Glycerine	**8.0 cc.**
Lime water	**20.0 cc.**
Peanut oil	**60.0 cc.**

Mix all ingredients except the peanut oil together, then slowly with stirring, add the oil to this mixture. Mix until homogenous.

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Oil of Homalomena Rubescens

In a report on the constitution of the essential oil of *Homalomena rubescens*, R. Palland (*Bull. soc. Chim. France*, 1953, p. 841, through *Chem. Abstr.* 47: 12766, 1953) states that the oil distilled from the rootstocks was a slightly yellowish, slightly viscous liquid with a pleasant odor reminiscent of that of the essence of coriander. Its analytic constants were:

Specific gravity	**0.8935**
Specific rotation	**—6° 8′**
Index of refraction	**1.4719**
Acid number	**0.4**
Ester number	**1.4**
Ester number, after formylation	**241.3**
Carbonyl number (in the cold)	**11.1**
Carbonyl number (warm)	**22.4**

The essence contained about 60 per cent of *l*-linalool and traces of linalyl and *alpha*-terpineol.

Laboratory Fractionation

In discussing a review on laboratory fractionation by E. F. G. Herrington, it is noted in the *Perfumery and Essential Oil Record* (44:277, 1953) that this is a technique which is used extensively with essential oils since it is practically the only means of separating the individual constituents. The four main parts of a distillation unit are: (a) the boiler, (b) the column, (c) the container, and (d) the reflex head.

Regarding packing, Herrington states that the modern tendency is to favor some form of metal gauze packing. In the selection of the most suitable packing a number of factors have to be considered, including: (a) the efficiency of the elements to produce separation, (b) the liquid hold up, (c) the maximum boil up rate, (d) the ease of flooding, (e) the pressure drop across the packing, (f) the tendency of the packing to contaminate the material under distillation. Also there are the considerations as to whether it is necessary to preflood the packing to get the maximum efficiency or whether the packing is easy to fabricate or is mechanically strong. Of the various packings available a compromise has to be made and no single packing material is better than any other in all respects.

New Essential Oil Specifications

Nine new official specifications, as well as modifications of older specifications for essential oils and aromatic chemicals, have been issued by the Essential Oil Association of U. S. A. The new standards include E.O.A. specifications from number 69 through 77; covering camphor oil 1070; oil linaloe wood; oil sage, Spanish; oil pennyroyal; oil pimento leaf; iso bornyl acetate; oil cananga; oil sweet marjoram; and, oil clary sage.

New, revised specifications that supersede the original have also been issued for hydroxycitronellal (E.O.A. Spec. No. 5) and for heliotropine (E.O.A. Spec. No. 6). In addition, the Association has issued revisions for the following aromatic chemical specifications: terpineol, terpinyl acetate, geranyl acetate, safrole, amyl salicylate, cinnamic alcohol (synthetic), methyl phenyl acetate, and methyl phenyl carbinol. Revisions for essential oil specifications have likewise been given for the following materials: oil bois de rose Brazilian, oil petitgrain Paraguay, oil spike lavender, oil lemongrass, oil copiaba, oil citronella Ceylon, oil ginger, oil citronella Java type, oil cajeput, oil patchouly, oil vetiver, oil palmarosa, oil grapefruit expressed, oil spruce, oil cedarwood and cedarwood Texas, oil lavandin, oil sage Dalmatian, oil dillweed American, and oil emyris. The first E.O.A. apparatus specification has also been prepared by the Association to provide standards for a cassia flask.

Oil of Juniperys Pheonicea

As part of their studies of aromatic Portugese plants, A. F. Costa and J. C. Do Vale (*Perf. & Essent. Oil Rec.* 44: 287, 1953) have made an analysis of an oil of *Juniperys phenonicea L.* This is a woody coniferous plant from the Mediterranean coast, the infructescenses of which, on distillation, yield an oil which is sometimes used as a substitute for oil of savin. In Portugal, the plant is found mainly in the sandy grounds of the coast and is known as "seaside savin." The oil is a colorless liquid with a characteristic odor. It has the following properties:

Specific gravity	**0.8667**
Specific rotation	**2° 30′**
Index of refraction	**1,4716**
Ester number	**10.6**
Ester number, after acetylation	**17.6**
Ester content	**4.8 per cent**
Alcohols	**3.7 " "**

The constants for 18 fractions were also obtained. Examination of the fractionation diagram indicates that the oil contains approximately 78 per cent of *alpha*-pinene, six per cent of nopinene, eight per cent of limonene and two per cent of phellandrene. Traces of furfural were also present.

Camphor Red Oil

The compositions of the 12 distillates obtained by the distillation of camphor red oil by means of the Podbielniak apparatus were examined by H. Watanabe and T. Azumi (*J. Chem. Soc. Japan.* 55:529, 1952 through *Chem. Abstr.* 48:4184, 1954). The principal

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NINETEEN FIFTY-FIVE with its inevitable array of new lines, new products and new fragrance trends is not as far off—for purposes of practical planning—as the current calendar would indicate. A number of firms have already made good progress in this direction. It is therefore our suggestion to all those who do contemplate changes in their 1955 merchandise that they give their suppliers as much time as possible to formulate and thoroughly test their complex new fragrances. Right now, '55 seems far away, but remember this: Time's a fleeting!

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Animal Health

Effect of Terramycin on Turkey Poults

In the studies of H. Dymsza, R. V. Boucher and E. W. Callenbach (*Poultry Sci.* 32:989, 1953), 180 day-old White Holland poults were divided into two equal groups and fed the regular station diet with and without Terramycin. At four weeks of age, 25 female poults were selected from each group for certain weight measurements and chemical analyses.

Poults that received the diet supplemented with the antibiotic were significantly heavier in live and empty weights. Their empty intestinal tracts and gizzards were significantly and proportionately heavier than those of the untreated birds. When expressed as per cent of empty weight, the average weights of intestinal tracts, gizzards, ceca, and alimentary contents of poults in both groups had approximately similar values. Chemical analyses showed that the growth increase attributed to Terramycin had little relation to carcass composition, with the possible exception of an increase in dry matter content. The ether extract content varied considerably between individual samples, and was slightly but not significantly higher in carcasses from the Terramycin-fed group. No group differences were apparent in carcass protein or ash content.

The overall effect of antibiotic supplementation appeared to be production of larger birds of narmal composition.

Estrogens as Lactation Stimulants

According to a note in the *Journal of the American Veterinary Medical Association* (124:190, 1954) lactation can be induced with estrogens such as stilbestrol in 70 per cent of unbred heifers, sterile cows, and goats, but less than 50 per cent produce commercially profitable quantities of milk. The subcutaneous injection of oily solutions or the implantation of pellets are the most practical means of administration. Treated animals are almost constantly in heat; their behavior resembles nymphomaniacs, their ovaries are small and inactive, and the estrous cycle is absent. Physical changes result in frequent pelvic and other fractures and dislocations. Because of the uncertain results and undesirable side effects, this treatment is not recommended.

Dieldrin for Sheep Scab

According to a note in *Veterinary Medicine* (49:128, 1954), a report from South Africa states that a single dipping in 0.03 per cent dieldrin is an effective and safe treatment for psoroptic sheep scab. The tests were limited, but results were interpreted as superior to those obtained with BHC. Aldrin was not reliable in concentrations of 0.05 per cent, and higher concentrations of either chemical are contraindicated because of the risk of poisoning.

Effect of Stilbestrol and Bacitracin on Lambs

An experiment was conducted by R. M. Richard and W. E. Dinusson (*Bimo. Bull. N. Dakola Agri. Exper. Sta.* 16:86, 1954) to study the effect of the synthetic hormone, stilbestrol, and the antibiotic, bacitracin, upon the rate and economy of gain of growing and fattening lambs. Implanting 12 mg. of the synthetic hormone, stilbestrol, under the skin in the head region of growing and fattening lambs resulted in significantly increased growth rate and greater economy of gain. Implanting 1000 units of the antibiotic, bacitracin, under the skin in the head region of growing and fattening lambs failed to improve the rate of gain. The economy of gain was lessened by bacitracin treatment. Stilbestrol and bacitracin had no effect upon the selling price per hundredweight or the carcass grade of the lambs. Stilbestrol treatment did result in a lowered dressing percentage.

Richard and Dinusson feel that attention should be called to the fact that the use of hormones on animals to be slaughtered for human consumption has not yet been approved by the Federal Food and Drug Administration.

Oral Sodium Acetate for Ketosis

In the experiments made by W. J. Miller, W. J. Tyznik, N. N. Allen and D. K. Sorensen (*J. Am. Vet. Med. Assoc.* 124:291, 1954) sodium acetate was fed at rates varying from one-fourth to one pound daily to 34 cows showing signs of ketosis. Blood sugar and ketones and, in most cases, urine ketones were determined. Of the 34 cases, 18 recovered with no other treatment, six were confused by complicating factors, incomplete information, or by other treatment given simultaneously, and 10 failed to respond. Of the 10, eight also failed to respond to intravenous glucose treatment, and two of the eight to sodium propionate feeding. Only one of the 10 responded to glucose therapy.

Fifteen other cows from which blood samples were not analyzed made satisfactory recoveries from clinical signs following sodium acetate as the sole treatment.

The sodium salt of the acetate was used, since it is inexpensive, readily obtainable, and not unpalatable to most animals. It is thought that the acetate, a readily metabolized source of energy, may have a sparing action on blood sugars, or may contribute directly to complete oxidation of the fats. The sodium, by increasing the alkali reserves of the blood, may contribute to relief

of any acidosis caused by the ketones in the blood stream. Also, sodium acetate seemed to have a stimulating effect on the appetite of some animals. It is nontoxic, as indicated by a trial with 18 normal cows fed one pound per head daily during ten-day periods. Sodium acetate should be compatible with other treatments and may have value when used in combination with them. While in some cases the apparent response to acetate feeding was almost immediate, usually the reaction was slower than with glucose therapy. The frequency of ketosis recurrence following a single intravenous treatment with glucose suggests that oral sodium acetate might be useful following glucose therapy.

Phosphorus Requirements of Hens

According to M. B. Gillis, L. C. Morris and G. F. Heuser (*Poultry Sci.* 32:977, 1953), the prosphorus requirement of laying hens has not been adequately defined. They report that experiments with White Leghorn pullets have shown that phosphorus in phytin is not as satisfactory as that from inorganic phosphorus supplements in meeting the requirements of laying birds. This was found to be true of both purified calcium phytate and the phytin found in common feedstuffs of plant origin. From the data available it is estimated that the hens in these experiments utilized phytin phosphorus approximately one-half as effectively as they utilized defluorinated phosphate or dicalcium phosphate.

Under the conditions of these experiments, it appeared that 0.5 per cent of inorganic or "available" phosphorus was required for egg production and maintenance of weight. For the maintenance of optimum blood levels of phosphorus and prevention of decalcification of bone, however, the requirement was approximately 0.6 per cent phosphorus.

Acute Bloat

It is pointed out by R. C. Klussendorf (*N. Am. Vet.* 35:345, 1954) that probably no common ailment of cattle is so controversial as acute bloat — the theories as to its cause, the preventive measures which might be effective, and the treatments. All are subject to wide differences of opinion. Thus, treatment of bloat provides ample scope for individual initiative, imagination, and improvisation. The simplest is administering kerosene or turpentine, and the most complex is rumenotomy to remove a considerable mass of the offending roughage. The mild cases may need no more than to have the front feet elevated a few inches and a gag put in the mouth. The usual cases may be treated with any combination of rumen stimulants, antiferments and protectants and/or the use of the small or the oversize Kingman stomach tube. The severe cases must be relieved quickly with a trocar or knife, and rumen evacuation when possible. The newest treatment is introduction of one of the silicone products or related "defoaming agents" to increase the surface tension and present the gas in large pockets which can be readily expelled, intead of holding it in millions of small bubbles as "foam."

Hypovitaminosis A in Calves

After briefly reviewing the literature on the subject of avitaminosis A, C. F. Hemboldt and his colleagues (*Am. J. Vet. Res.* 14:434, 1953) carried out a series of experiments in calves in order to determine the clinical symptoms, the spinal fluid pressures, the histopathological changes and to assay the blood plasma and liver levels of vitamin A and carotene. The calves were divided into groups and fed carefully controlled diets. Diarrhea and incoordination were consistent aspects of vitamin A deficiency. Cerebrospinal fluid pressure rose from about 95 to over 178 mm. and in some instances to over 505 mm. Histological examinations showed squamous metaplasia of the interlobular ducts and the main duct of the parotid gland. This was regarded as pathognomonic. Focal hepatic necrosis was seen in some cases. The crude data suggested that depleted calves were more susceptible to pneumonia than were the supplemented animals but statistical analysis failed to reveal any significant relationship.

Carotene failed to reverse the pathognomonic lesions of the parotid gland although it did ameliorate the diarrhea and incoordination. Vitamin A feeding for two weeks produced partial reversal of the squamous metaplasia, and four weeks brought about complete recovery.

Furazolidone for Fowl Typhoid

Fowl typhoid is a disease of major economic importance to the poultry industry. According to L. C. Grumbles, F. K. Wills and W. A. (*J. Am. Vet. Med. Assoc.* 124:217, 1954) no completely satisfactory treatment for the disease has been offered. A few of the sulfonamides, especially sulfaquinoxaline, have shown merit in reducing mortality associated with this condition. Satisfactory control of this disease by use of these drugs is not always obtainable. A study of furazolidone in the treatment of experimentally infected turkey poults was undertaken in order to determine the drug's effect on this disease.

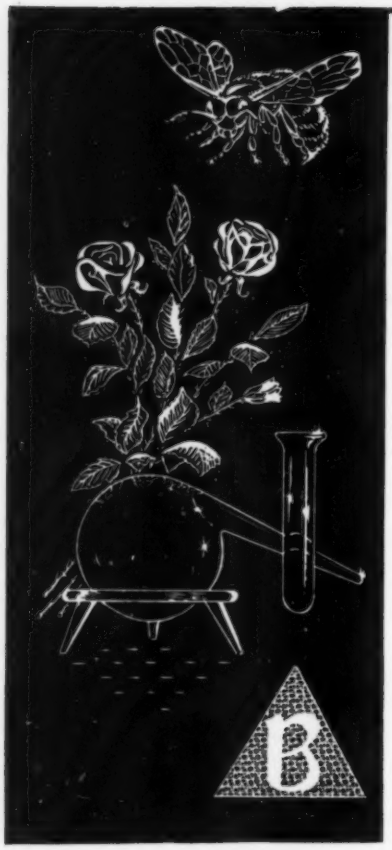
Furazolidone fed in the feed at levels of 0.011 per cent and 0.0055 per cent was found to be effective in preventing mortality associated with fowl typhoid (*Salmonella gallinarum*) infection in turkeys. The higher level of 0.011 per cent was found more effective in severely infected birds. No evidence of toxicity or unpalatability was encountered. Exposed and treated birds have been shown susceptible to reinfection and to be carriers of *S. gallinarum*.

Streptomycin in Swine Dysentery

Dysentery, says L. P. Doyle (*J. Am. Vet. Med. Assoc.* 124:195, 1954) is a specific type of swine enteritis. It is also known as bloody scours, black scours, bloody diarrhea, flux, and hemorrhagic colitis. It usually affects growing pigs and shoats. It less frequently attacks breeding stock and may be transmitted from brood sows to their offspring. The symptoms are diarrhea, dehydration, sunken flanks, emaciation, and a general unthrifty appearance. The blood in the feces may be reddish or blackish. The feces also contain mucus. Mortality is extremely variable, ranging from almost no losses to as high as 50 per cent or more. Considerable economic loss results from the setback and weight losses suffered by the pigs, in addition to the mortality.

The study reported by Doyle involved a total of 2,793 pigs in 11 herds. The material used to treat the swine dysentery was an impure mixture of streptomycin containing 36 to 60 per cent of the antibiotic. The dosages varied from 0.5 to 2.0 Gm. per pig per day for two days, with an average dose of 0.7 Gm. It was most effctive when given in the drinking water.

From this study, it appears that streptomycin possesses considerable efficacy in controlling mortality and weight losses caused by swine dysentery. However, when used as a preventive, streptomycin failed to entirely prevent dysentery. The treatments used did not prevent the recurrence of swine dysentery in all cases. However, re-treatment was followed by marked improvement in most instances.



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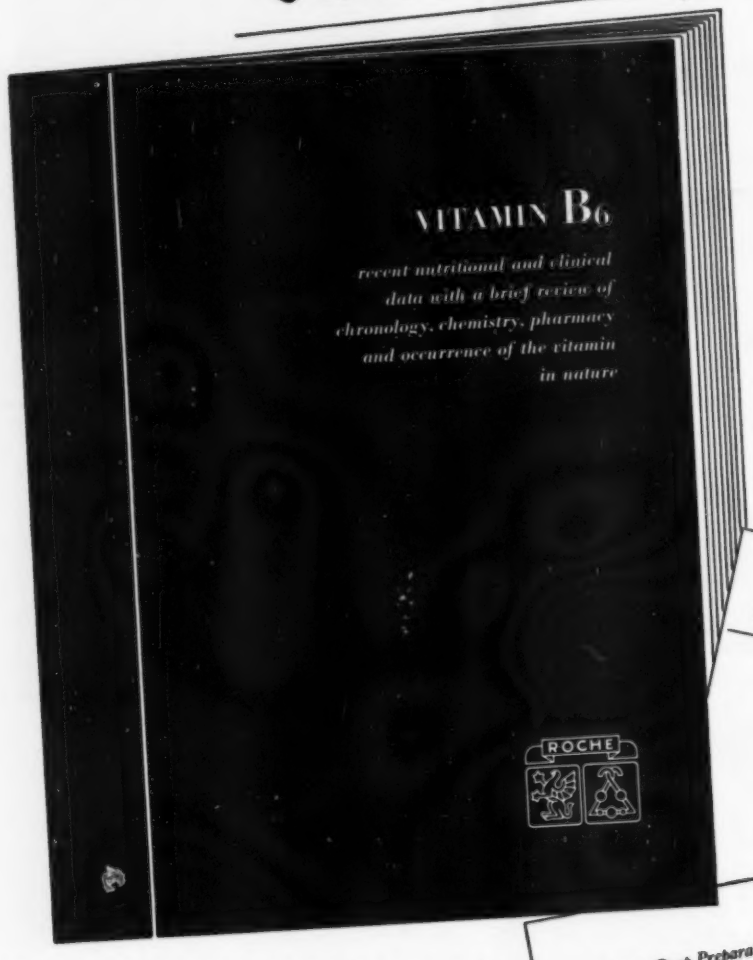
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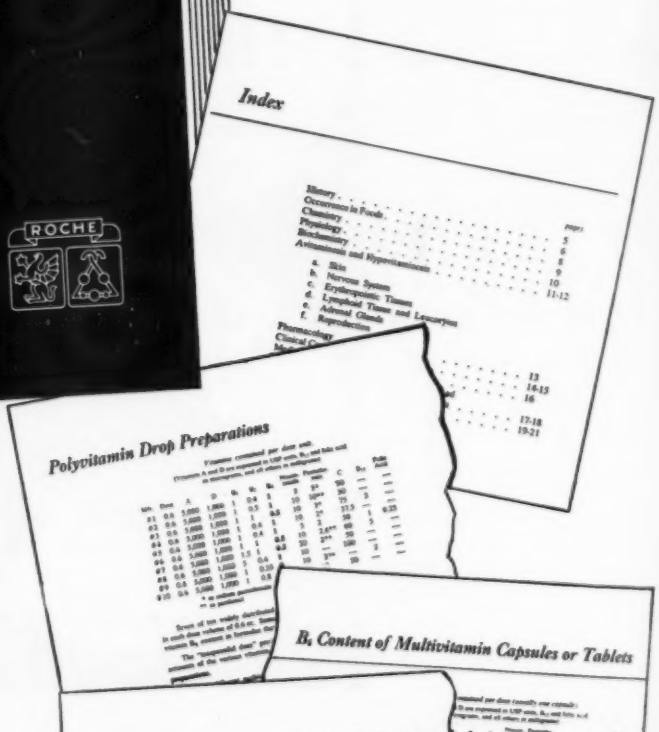

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Abreast of the Markets

Mercury, Mercurials Higher

Continuing the rising trend which pushed quicksilver up to a record level last month, the metal advanced further in May to the new high of $275 a flask. Major suppliers were restricting buyers to small lots of the metal.

Following this advance in the metal itself, several mercurials followed the same line. Those affected were calomel, corrosive sublimate, ammoniated mercury and yellow and red mercury oxides.

This is the highest price at which quicksilver has ever been sold and has occurred at a time when the metal is in very short supply.

The United States has attempted to purchase mercury from Italy with little success, as that country has indicated that no stocks are available. At the same time, it is reported that no metal is to be had from Spain. Shipments from Yugoslavia are expected in this country within the next few months, but these have already been spoken for.

Tartrates Firmer

Shipping prices on foreign tartrates are showing a decided firmness, mostly because of the large amount of tartaric acid being bought up by Germany and Great Britain. There have been no price movements in this country, but in view of what is happening in the foreign market, firmer quotations are expected.

Essential Oils Steady

There were no unusual developments in the essential oil market during May. Such oils as anise and cassia continued to be most difficult to obtain, while the citrus oils began to show increased activity with the approach of much warmer weather.

Lemon Oil

The only noteworthy incident in the citrus line was the decrease in the California Lemon Oil price to $6.50 a pound in 35-pound cans or 385-pound drums. The domestic lemon oil was very short during the first part of this year; however, Italian imports have been supplementing the lack of supply. The outlook for this oil at present is on the optimistic side because additional groves of fruit trees are now said to be productive and adding to the available supply of oil.

Citronella Oil Advancing

Citronella oil continued to advance in the face of rather strong demand and very limited supplies here on the spot market.

Botanicals Show Increased Demand

All along the line there is a definite renewed interest in botanical drugs, in contrast to the last few years when this particular market has been exceedingly sluggish, with few exceptions. At the same time, foreign sources are beginning to move their quotations in accordance with this more active market.

No Relief in Agar

Although new stocks were received in this country recently, the outlook is not favorable in agar agar. In contrast to a year ago, the price of the botanical is a good deal higher; the stocks on hand are not believed sufficient to satisfy all needs through the rest of 1954. However, replacements probably will not be ready until the first quarter of next year, and therefore a much tighter situation is looked for.

Arnica Flowers Scarce

Montana, N.F., arnica flowers are extremely limited, with the new-crop material not expected for a long time. Last month's price ranged from $2 to $2.05 and probably will go a good deal higher as the spot supplies become less and less.

Orris Root Scarce

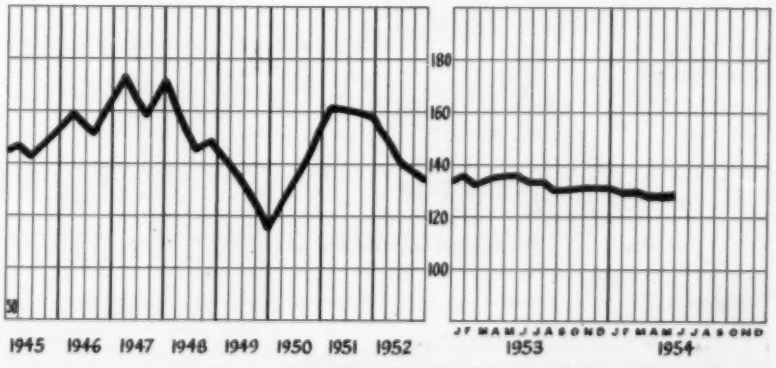
There is a very limited supply of orris root to be had in the producing regions, both the Verona and the Florentine grades being difficult to obtain. Dealers point out that the condition may become less severe toward the end of the year when the new crop reaches the spot market—but this is only conjecture.

Replacement for Balsam Fir

Givaudan-Delawanna, Inc. has developed a replacement product for natural balsam fir Oregon which is to be sold under the name of Fir Balsam PA. It is comparable to the natural material both olfactorily and also on the basis of chemical and physical properties.

The product is recommended for use as a fixative in pine soap odors and in air deodorants, bath preparations and detergents.

50 RAW MATERIALS—WEIGHTED PRICE INDEX. 1926 – 100.



The price index of fifty commodities for May advanced from 127.5 to 128.4.

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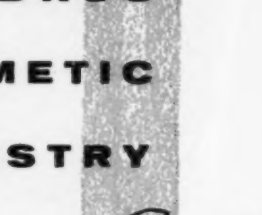

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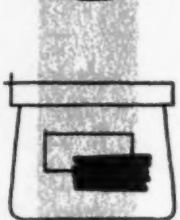

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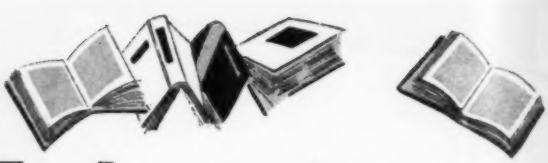


Industry's Books...

Chemical Engineering in Practice, *Edited by James I. Harper, Assistant Director Research and Development Department, Sun Oil Co., 140 pp., Book Div., Reinhold Publishing Corp., New York, (1954), Cloth* **$3.** This is a collection of papers originally presented in Philadelphia, Pa., May 12, 1953, under the auspices of the Philadelphia-Wilmington Section of the American Institute of Chemical Engineers and the Department of Chemical Engineering, University of Pennsylvania. Emphasis throughout is on the varied roles of the Chemical engineer in industry, and on how various phases of research are integrated to produce the best overall result.

The Science Book of Wonder Drugs, *by Donald G. Cooley, Franklin Watts, Inc., New York (1954), 247 pp., Illus., Cloth,* **$2.95.** Here is the absorbing story of the modern pharmaceutical revolution which is changing man's life. For the first time in human history scientists are beginning to understand the intricate chemical processes that go on inside the minute cells of the body. In these complex operations lie the secrets of why and how drugs work, and the key to drugs yet undiscovered which may someday be "made to order" to overcome diseases now mysterious and fatal. The author tells the story of drugs already developed—sulfas, antibiotics, vitamins and hormones, as well as a variety of others for the treatment of specific illnesses. In addition he summarizes work in progress, and offers thrilling glimpses of drugs foreshadowed for the future which may conquer cancer, polio, and other diseases now baffling to mankind.

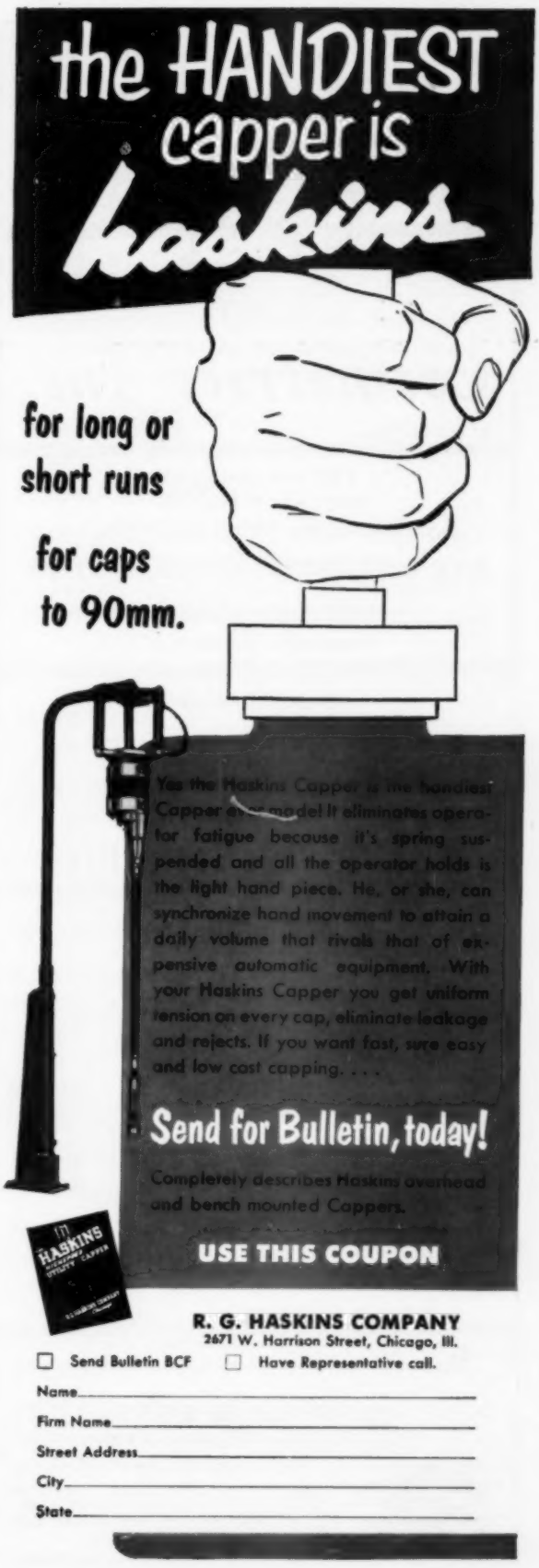
A Textbook of Forensic Pharmacy, *by Thomas Dewar, Ph.D., B.Pharm., of The Middle Temple, Barrister-at-Law, Examiner to the Pharmaceutical Society of Great Britain, 287 pp., Edward Arnold Ltd., London, Third Ed., (1954), Cloth,* **$4.** The aim of the author has been to present in a single volume all the forensic pharmacy which is ordinarily taught to those studying for the qualifying examinations of the Pharmaceutical Society of Great Britain. The subject-matter is divided into three parts: Part I deals with pharmacy, poisons and dangerous drugs; Part II with medicines; and Part III with enactments, such as the Shops Acts, which chiefly concern retail business. The Poisons List, Schedules to the Poisons Rules, 1935, a list of poisons which are the subject of monographs in the British

Pharmacopoeia, and revision questions arranged to correspond chapter by chapter with the subject-matter of the book are included as appendices. The law as stated in this book is that of England.

Introduction to Pharmacy, *by Henry M. Burlage, Ph.D., University of Texas, Joseph B. Burt, Ph.D., University of Nebraska, Charles O. Lee, Ph.D., Purdue University, and L. Wait Rising, Ph.D., University of Washington, Third Ed., 710 pp., McGraw-Hill Book Co., New York, (1954), Cloth,* **$9.50.** This is the third edition of an excellent guide to introductory pharmacy formerly entitled Fundamental Principles and Processes of Pharmacy. Thoroughly revised to meet the changes in the United States Pharmacopoeia XIV and the National Formulary IX, the text has also been changed to bring about a gradual transition toward the latest physical and chemical aspects of modern pharmaceutical technology by the addition of up-to-date material on solutions and physico-chemical methods of separation. Many of the illustrations, especially those of apparatus, the references to collateral readings, and the list of visual aids are new and current. As a manual of instruction, the work gives a clear exposition of the basic principles and techniques necessary for advancement to more difficult courses in pharmacy.

The Properties of Glass, *Second Ed., by George W. Morey, Member of the Staff of the Geophysical Laboratory, Carnegie Institution of Washington, 591 pp., American Chemical Society Monograph Series No. 124, Book Div., Reinhold Publishing Corp., New York, (1954), Cloth,* **$16.50.** This new edition of Morey's widely known monograph will prove of even greater value than ever before to scientists and technologists in all phases of research. The Second Edition is considerably larger than its predecessor, and contains a greater number of tables and illustrations. Several of the chapters have been rearranged to include new material in a more logical fashion, and completely new sections on non-silicate glasses and the effects of radiation on glass have been added. Literature references through the middle of 1953 are included.

Six-Figure Mathematical Tables, *by L. J. Comrie, M.A., Ph.D., F.R.S., Scientific Computing Service Limited, 387 pp., Chemical Publishing Co., Inc., New York, (1954), Cloth,* **$6.50.** This is a new collection of mathematical tables by an outstanding authority on the science of computation. This volume contains those tables which are essential for general purposes requiring more than four-figure accuracy. L. J. Comrie, the compiler of this volume, was formerly Superintendent of H. M. Nautical Almanac and is now head of Scientific Computing Service Ltd., London. He has devoted a lifetime to the study of computation in all its aspects, and has to his credit a large number of mathematical and other tables.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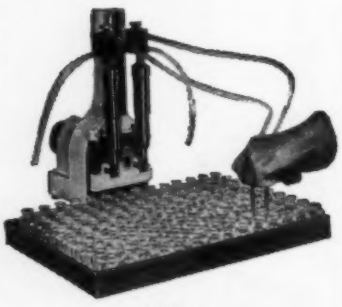

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(Continued from page 790)

diately by the intravenous administration of 1,000 mg. of ascorbic acid. Shortly after the injections, there was alleviation of pain, increased range of motion, elevation of skin temperature around the joints, and decided exhilaration in some patients. As a rule the effects lasted from two to six hours, occasionally longer.

Their procedure, which attracted considerable attention, was tried by other workers. Thus, Mettior and his colleagues[76] reported that all of their patients with rheumatoid arthritis showed a prompt lessening of pain and tenderness and an increased range of motion in the involved joints following the first injections. Le Vay and Loxton[77] also reported improvement in a high proportion of cases. Other clinicians[78] similarly reported beneficial results in patients with joint diseases.

Others,[79-81] however, could not obtain such benefits from the desoxycorticosterone acetate in ascorbic acid injections. Kling,[82] who did observe objective improvement in 14 cases, felt that the dangerous side-effects made the treatmet too hazardous.

In passing it may be mentioned that Italian workers[83] have obtained improvement in patients with rheumatic diseases following injections of total adrenal cortex combined with ascorbic acid.

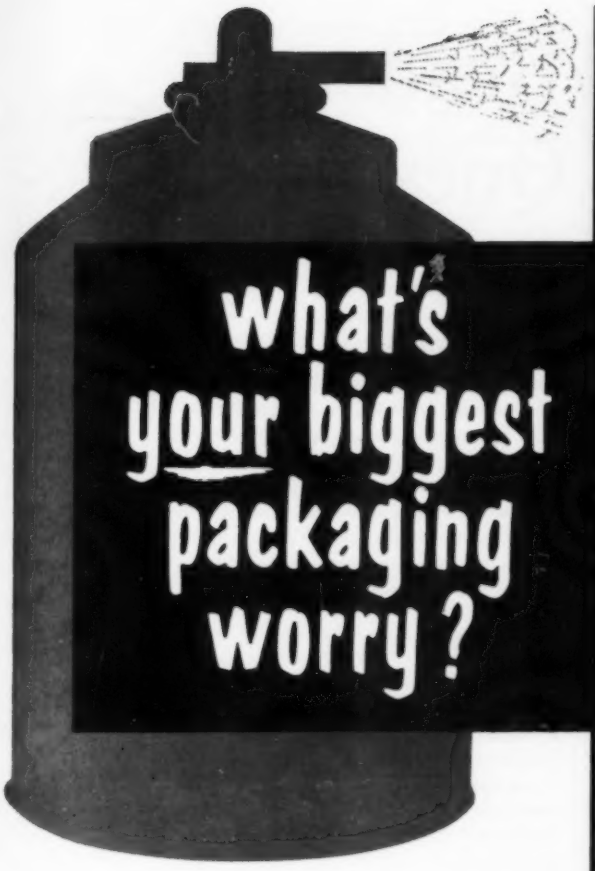
Another example of the value of ascorbic acid as a therapeutic adjunct is offered in McAllister's[84] report on the hormonal treatment of alcoholism with adrenal cortex extract. He found that the action of adrenal cortex hormone is poteniated when administered with ascorbic acid and more satisfactory results are obtained.

Vitamin C also cuts down the undesired side-effects when disulfiram (Antabuse) is used in the treatment of alcoholism.[85] Markham and Hoff[86] report that it is standard practice in their clinic to administer large doses of sodium ascorbate, up to 1.5 Gm. intravenously, to compensate for the inhibitory effect of disulfiram on oxidative enzymes.

Aside from such uses, vitamin C is important in its own right in the treatment of this condition. Feldman and Zucker[87] have stated that the administration of B vitamins and vitamin C is indicated in the management of the acute alcoholic state. They point out that, since all other foods are often abandoned for alcohol, a certain degree of acute avitaminosis can be assumed present after a drinking bout of more than a few days. Hence at least 0.5 to 1 Gm. of vitamin C should be given daily for the first two or three days.

Some of the beneficial effects of ascorbic acid are attributable to its detoxifying action. McCormick[53] describes the substance as a highly potent antitoxic agent in exogenous poisoning, both organic and inorganic. He[88] recommends calcium ascorbate, as a source of calcium and vitamin C, to combat the toxic effects of fluorine. In experimental fluoride poisoning

(Continued on page 874)



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* *The Dispensatory of the United States of America, 1950 Edition*

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Readers' Questions

Chapped Lip Pomade: I am interested in obtaining formulas for the preparation of a lip pomade for use in prevention of chafing as well as for prevention and treatment of chapped lips. This preparation will be packaged the same as the better lipsticks are today. Any information which you can give me in this connection will be greatly appreciated. KANSAS CITY.

A basic formula for such a product calls for:

Mineral oil	**6.00 parts**
Petrolatum	**2.00 "**
Paraffin	**2.00 "**
Ozokerite	**0.25 part**
Beeswax	**0.75 "**
Perfume	**0.50 "**

The ingredients are melted together and poured into a suitable mold. Materials such as menthol, camphor, thymol and similar medications may be used in small quantities in the formula.

A somewhat simpler base calls for a mixture of:

Beeswax	**10.0 parts**
Lanolin anhydrous	**10.0 "**
Mineral oil 210/220	**43.0 "**
Ceresin 64° C.	**37.0 "**

Liquid Brilliantines: I would like information on the formulation of liquid brilliantines. I should like to have easily prepared products because I do not have very much in the way of production equipment. HAVANA.

The simplest formulation for a product of this sort consists of light white mineral oil to which a suitable perfume is added. If a non-oily product is desired, the following formula will serve:

Glycerine	**40.0 per cent**
Alcohol	**40.0 " "**
Water	**19.0 " "**
Perfume	**1.0 " "**

Mix the perfume and alcohol. Add the glycerine to the water. Then add the perfumed alcohol and mix. Clear—could be colored. Of course, there are a number of

cream lotions which are used for dressing the hair but they are more difficult to make.

Toothache Drops: We would greatly appreciate a formula for toothache drops containing the following ingredients: creosote, phenol, oil of cloves, oil of cassia, chloroform and alcohol. PORTLAND.

I have checked the literature available to me and although I have not been able to meet your exact specifications, I think the following toothache essence, as given by Cipes, is in line with what you want:

Oil of cloves	**2 dr.**
Chloroform	**3 dr.**
Camphor	**4 dr.**
Phenol	**4 dr.**
Oil of turpentine	**1 oz.**
Alcohol	**1 oz.**

Hair Straighteners: I would like to obtain information and formulas if possible on hair straighteners, both the new and the old types. CHARLOTTE.

A comprehensive review of the new cold wave method of straightening hair was given in an article by W. R. Keithler, DRUG & COSMETIC INDUSTRY, Vol. 73, page 322, September 1953.

The three older types of hair straighteners include the rosin, the wax, and the gum type products. A formula for the first type, a rosin hair straightener as given by Thomssen, is as follows:

Petrolatum	**90.0 parts**
Rosin (W.G. grade)	**10.0 "**
Perfume	**2.0 "**

Melt the rosin with the petrolatum at 135° F. Stir well. Cool slightly. Add the perfume, mix and fill 5° F. above the congealing point.

Cologne Sticks: Can you give us a simple procedure for making solidified eau de cologne sticks.? I would like a method that does not require too much specialized equipment. BOMBAY.

The kind of equipment used for making solidified cologne will of course depend upon the scale at which you intend to manufacture cologne sticks. However, a simple basic formula for making such a product is as follows:

Sodium stearate	**7 parts**
Glycerine	**3 "**
Cologne perfume oil	**3 "**
Ethyl alcohol	**87 "**

The molded sticks should be allowed to cool slowly in order to prevent the formation of air pockets; the cooled sticks being wrapped in foil.

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Niagara District Engineers in Principal Cities of U. S. and Canada

(Continued from page 870)

studies on monkeys, it was found[89] that the administration of ascorbic acid can help to prevent fluorosis of the bones.

Chute[90] has found that ascorbic acid intramuscularly or intravenously in large doses furnishes effective treatment for the methemoglobinemia caused by nitrates in well water. With respect to organic substances, it should be noted that ascorbic acid has been used to combat the toxic effects of benzene[91] and aniline.[92]

It is also noteworthy that a high proportion of ascorbic acid is included in the successful antidote for drug coma due to barbiturates and related analgesic or sedative drugs. To be given by injection, this preparation[93] consists of:

Pyridoxine	200 mg.
Ascorbic acid	1,500 mg.
Glucose, 10 per cent solution	100 cc.
Thiamine hydrochloride	1,000 mg.
Nicotinamide	200 mg.
Distilled water or standard saline solution, to make	300 cc.

There is evidence that vitamin C is a useful adjunct to combat allergic symptoms. In a study of 60 patients, Brown and Ruskin[94] came to the conclusion that the administration of ascorbic acid may be a suitable type of adjuvant treatment for seasonal hay fever. Since the large doses of oral ascorbic acid may cause gastric irritation, Ruskin[15] suggested that the use of sodium ascorbate might be preferable. He found that the sodium salt was more effective than the acid in refractory cases of allergy and asthma.

Gastroenterologists have long recognized the importance of vitamin C and newer work[95,96] has further affirmed the role of this agent in patients with peptic ulcer. Especially indicative is Nash's[97] comparative study of an antacid with and without ascorbic acid in the treatment of peptic ulcer. He observed that the addition of vitamin C was followed by longer remissions and fewer relapses when compared to the control groups without the supplement. The observed beneficial effect of ascorbic acid given in conjunction with antacids and dietary treatment agrees very well with the generally accepted role of ascorbic and in the wound healing process. In addition, the findings give further support to the view that ulcer patients need larger daily doses of ascorbic acid than normal healthy people.

In a preliminary report, Scheffler[98] observed that ascorbic acid medication appears to be a valuable adjunct in treating various anorectal conditions. Low ascorbic acid plasma levels are frequently seen, says he, in patients with some acute seasonally-occurring disorders of this kind.

The interest shown in a recent report by Morris[99] reveals that gynecologists are aware of the value of vitamin C supplements. This investigator found that vitamin C deficiency is a common condition even today, accounting for a substantial proportion of cases of hypermenor-

rhea. In presenting four cases, he described how abnormal menstrual bleeding became normal following the intake of vitamin C and citrus juices. Morris advises that in all cases of prolonged or abnormal menstrual bleeding of otherwise undetermined origin, consideration should be given to the possibility of scurvy as the basic cause.

In another application, Karnaky[100] employs vitamin C, together with the B complex, to reduce nausea and vomiting following the administration of stilbestrol. Of a similar nature is the use of menadione and ascorbic acid in the treatment of nausea and vomiting of pregnancy.[101]

Considering the demands of the fetus and infant, it is obvious that high vitamin C intakes are required during pregnancy and lactation. It is also being found that vitamin C plays a major role in the prevention and treatment of miscarriage. Greenblatt[102] reported excellent results following the oral administration of vitamin C and hesperidin (vitamin P) in the therapy of habitual abortion. He suggests that increased capillary fragility may be a factor in this condition. Similar views were expressed by Javert,[103] who also advised high vitamin C intake to prevent abortions.

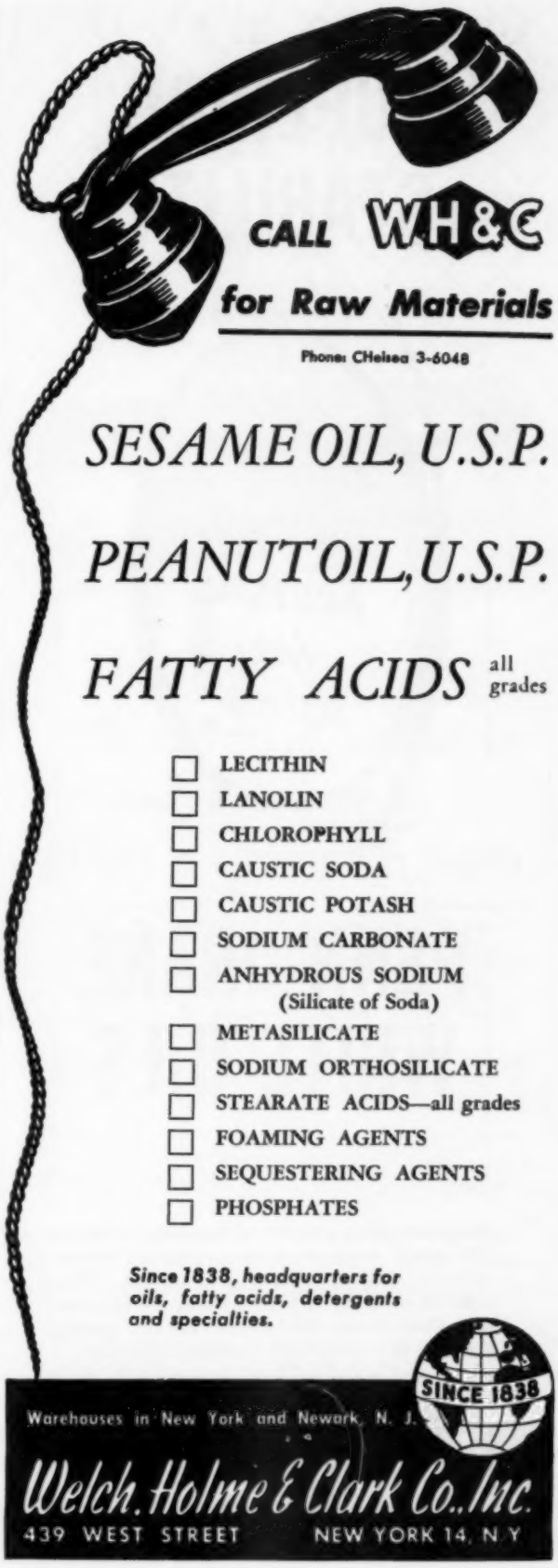
Interesting information on the influence of vitamin C on labor is provided in a therapeutic study made by Tash.[104] From observations on three groups of pregnant women, he concluded that although large doses of vitamin C have little effect on uterine inertia, the duration of labor is shortened and postpartum recovery is improved. Without drawing definite conclusions, Tash expresses the belief that the administration of this substance has a great advantage in influencing labor contractions and preventing infections.

McCormick[105] is of the opinion that the straie of pregnancy can be associated with vitamin C since it is now established that deficiency of this vitamin is conducive to decrease in the tensile strength of tissues in general. In studies on 26 pregnant women he found that the degree of striation was inversely proportional to the ascorbic acid level. If his hypothesis is correct, McCormick feels that vitamin C provides an "internal cosmetic" to combat premature loss of youthful tissue elasticity.

Other dermatologic investigations have extended the value of vitamin C. For example, Stern[106] has found that synthetic vitamin C, given orally in large doses (e.g. 500 mg. to adults, 100 mg. to small infants) relieved the itching and paresthesias and cleared the rash of prickly heat in patients in hot humid places and in dry, hot areas.

Using tablets containing a combination of procaine hydrochloride and ascorbic acid, Parish[107] obtained prompt relief of pruritus in a high proportion of patients suffering from atopic dermatitis, pruritus vulvae, urticaria, contact dermatitis, poison ivy dermatitis, pruritus ani, and, scabies. When the itching stopped the scratching stopped, and the lesions thus had a chance to heal. No significant side-effects were noted.

Working with a similar orally administered com-



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bination of procaine and ascorbic acid, Beinhauer[108] found that complete relief of pruritus was obtained in 22.2 per cent of patients, temporary relief in 27.9 per cent and failure in 49.9 per cent. The most effective response occurred in penicillin urticaria, herpes zoster and burning tongue. Generally speaking, however, it is felt that the effectiveness of this combination for the control of pruritus does not exceed that of other recognized therapies. Nonetheless, the combination warrants a trial when other measures fail.

According to Klasson,[109] intramuscular injections of ascorbic acid are of benefit in the treatment and prevention of poison oak dermatitis. He states that, through its physiologic action, vitamin C has possibilities in preventing the contraction of this condition, and it promptly alleviates the symptoms of the already contracted disease.

Vitamin C is finding growing use in the treatment of respiratory disorders. Thus, an improved method for the treatment of inflamed nasal tissue has been described by Poser.[110] This consists of applying a vitamin C solution locally, as a spray or drops, in order to restore the normal physiology of the tissue. Some relief is seen immediately after appreciation and no ill effects have been noted.

Brody's[111] studies led him to the conclusion that 200 mg. of ascorbic acid daily had reduced the incidence of colds from 2.2 to 1.9 per year in college students. Hence he advises that the vitamin be given early and often to abort colds. Indeed, one pharmaceutical company has added vitamin C to its cold tablet formula; this addition being based on the view that the body's supply of ascorbic acid is reduced during colds and stress.[112]

In Holland, de Wit[113] administered vitamin C to children with whooping cough. When given in the catarrhal stage, ascorbic acid prevented the convulsive stage in 75 per cent of the cases, and the number of complications was negligible. The average duration of illness was also decreased.

The association between vitamin C, blood formation and anemia has been further clarified and applied clinically during the last few years.[114-118] A recent editorial discussion[119] of this relationship calls particular attention to the work of Bronte-Stewart[120] and of Proehl and May.[121] Their data, notes the editorial, provides good evidence that if the diet is deficient in ascorbic acid for long enough, anemia will result. Obviously, if this deficiency is unrecognized and untreated, the anemia may resist the usual hematinics. The discussion concludes with the observations: "It is good to know, too, that the habit of prescribing iron and vitamin C together has some scientific support." It might also be noted in this connection that Albers[122] has offered an explanation of the mechanism by which ascorbic acid improves iron metabolism.

Other studies have pointed to the usefulness of vitamin C in the prevention and treatment of circulatory disorders. Thus, from data gathered in experiments on animals, Willis[123] suggested that massive parenteral

doses of ascorbic acid may be of therapeutic value in the treatment of atherosclerosis and the prevention of intimal hemorrhage and of thrombosis.

The value of ascorbic acid as a therapeutic adjuvant is shown in a study of a group of patients with impairment of the lower extremities because of arteriosclerosis. As a result of this investigation, a national method of treatment of arteriosclerosis obliterans was suggested with initial therapy consisting of parenterally administered histidine and ascorbic acid until relief is obtained, with subsequent maintenance of orally administered histidine and ascorbic acid.

Neivert and his associates[125] have found that ascorbic acid and vitamin K are of value in patients with nasal hemorrhage, even when there is a definite local or general cause for the nosebleed. They found ascorbic acid deficiency in 93 of 104 such patients.

Vitamin C deficiency is, of course, an important factor in capillary fragility.[27,130] Studies of this condition and its consequences provide increasing information on the relationship of ascorbic acid and such substances as vitamin P (hesperidin) rutin and certain other flavoroids. This is an extensive subject in itself. However, it should be pointed out that combinations of vitamin C with such substances have been used, not only in the previously cited treatment of habitual abortion, but also in the therapy of radiation sickness.[126] diabetic retinopathy,[127] and vascular disorders.

Particularly noteworthy is the study by Gale and Thewlis[128] on the value of vitamin C and vitamin P in the treatment of cardiovascular and cerebrovascular disease. Because of the role of these materials in maintaining vascular integrity, it is believed that many instances of hemorrhage and thrombosis in the heart and brain may be avoided if adequate amounts of vitamins C and P are given. These views have been confirmed clinically; vascular disturbances relieved by these agents including dizziness, nose bleed, and chronic heart failure with intermittent dyspnea. It is also pointed out that many symptoms of vascular disturbances of the aged suggest that latent scurvy may be fairly frequent and that large amounts of supplementary vitamin C are necessary.

In passing, it may be mentioned that there is evidence that improvement in the mental state of the aged may occur after giving supplements of the vitamin B complex together with vitamin C.[129]

The research and medical literature point to the potentialities of vitamin C in various other conditions. Without going into details, it may be said that these include the therapy of hypertension,[130] rheumatic fever,[131] multiple sclerosis,[132,139] and tularemia.[134] Investigations by Weaver[135] indicate that a definite reduction in the occurrence of heat prostration can be attained by the administration of vitamin C. However, Craig and his colleagues[136] observed no changes in the plasma ascorbic acid levels when the body temperatures of 58 patients were raised to as high as 106° F. by means of physically induced fever.

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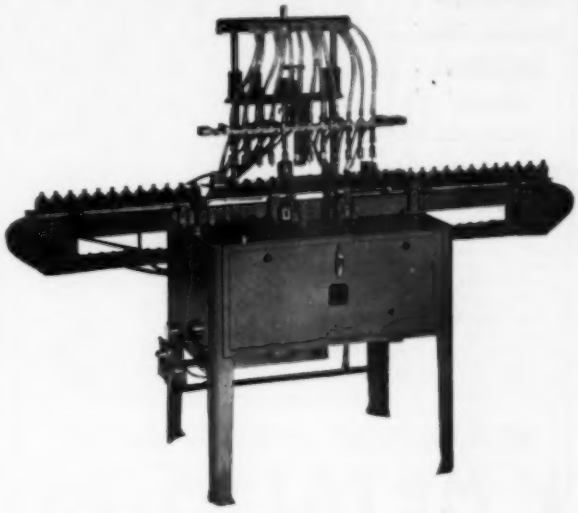

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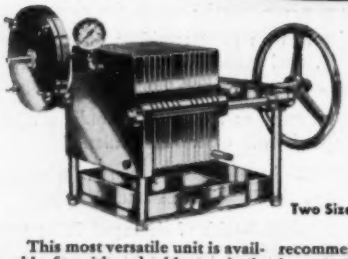

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ascorbic acid are being consumed for the processing and fortification of foods. This, of course, is another example of the growing interdependence of the pharmaceutical and food industries. The extent to which such utility has grown and the wide range of application has been well indicated in Bauernfeind's[3] comprehensive review on the use of ascorbic acid in processing foods. This information, as well as the data provided in technical reports and manufacturers' literature, point to the value of ascorbic acid as a means of arresting the development of discoloration, off-flavor or rancidity in such products as canned and frozen fruits and vegetables, milk and milk products, beer, oils and fats, fish, and meat.

Many of these applications have become an integral part of standard food processing procedures, while others are still in the development stage. Well established, for example, is the addition of ascorbic acid to frozen foods to delay enzymic browning. The advantage of using ascorbic acid becomes readily apparent when it is realized that most varieties of peaches, apricots, plums, pears, nectarines, cherries, bananas and apples discolor readily when the frozen product is thawed. There is also concurrent development of off-flavor.[3]

A more recent development, and one that is attracting considerable interest, is the use of ascorbic acid to improve the color and appearance and accelerating the curing of meat products.[3,137-139] Such utility opens a new and promising market for ascorbic acid and sodium ascorbate.

Incidental to the use of ascorbic acid in food processing is the fact that the treated foods are simultaneously provided with additional quantities of beneficial vitamin C. This, of course, is quite different from fortification, where the purpose is to raise the vitamin C content of foods, especially juices, to specific levels. The advantages of these fortifying juices, like citrus, apple, grape, pineapple, prune, tomato, and vegetable blends, are now being recognized and the additions encouraged.[140]

These advantages are indicated in Fishbein's[143] discussion of vitamin C restoration and reinforcement. He points out that while many people realize that they must depend on fruit juices for their vitamin C, they fail to appreciate the wide differences in the amount of this nutrient in the various juices. To explain one cause for these differences, he cites recent studies which have shown that great variations exist in the natural vitamin C content of juices from fruits and vegetables grown in different parts of the country.

As remarked by Bauernfeind,[3] it is economically, practically, and nutritionally feasible to add ascorbic acid to fruit and vegetable juices to standardize their vitamin C potency. However, the level of such enrichment must also be determined and optimum additions must be established. This factor is apparently still under consideration by nutritionists.

It is quite evident from the foregoing that vitamin C continues to be a subject of considerable interest to the nutritionist, the physiologist, the clinician and the

chemist. Their findings, coupled with those of industrial research workers, are reflected in the pharmaceutical and food processing plants of the nation.

BIBLIOGRAPHY *(continued)*

61. Dogramaci, I.: New England J. Med. 235:185, 1946.
62. Ellenbogen, L. S., Crowe, A. C. & Green, M.: J. Med. Soc. New Jersey 48:73, 1951.
63. Tisdall, F. F.: Interne 13:496, 1947.
64. Baume, L. J.: (through) Science News Letter 64:103, 1953.
65. Schumacher: Ohio State Med. J. 42:1248, 1946.
66. Zoll, C. A., Shirley, R. & Villani, S.: Am. J. Digest. Dis. 19:259, 1952.
67. Schilling, J. A. et al: Surg., Gynec. & Obstet. 97:434, 1953.
68. Pirani, C. L. & Levenson, S. M.: Proc. Soc. Exptl. Biol. & Med. 82:95, 1953.
69. Klasson, D. H.: New York State J. Med. 51:2388, 1951.
70. Banerjee, S. & Belavady, B.: Lancet 2: 912, 1953.
71. Getz, H. R.: Paper delivered before American Dietetic Assoc. Meeting, Los Angeles, Aug. 1953.
72. Pichet, P. & Reveilleau, A.: Ann. Inst. Pasteur 79:342, 1950.
73. McCormick, W. J.: Arch. Pediat. 68:1, 1951.
74. Klenner, F. R.: South Med. & Surg. 111:209, 1949; 113:101, 1951.
75. Lewin, E. & Wassen, E.: Lancet 2:993, 1949.
76. Mettior, S. R. et al: Bull. Univ. California Med. Center 1:337, 1950.
77. Le Vay, D. & Loxton, G. E.: Lancet 2:1134, 1949; 1:209, 1950.
78. Buttaro, C. A. & Meszetti-Panozzi, E.: Policlinico 57:653, 1950.
79. Spies, T. D. et al: Lancet 2:1219, 1949.
80. Curry, J. P. & Will, G.: Lancet 1:708, 1950.
81. Bywaters, E. G. L., Dixon, A. St. J. & Wild, J. B.: Lancet 1:951, 1950.
82. Kling, D. H.: J. A. M. A. 143:791, 1950.
83. Bassi, D. & Zotti, G.: Settimana Med. 39:162, 1951.
84. McAllister, R. G.: GP 7:41, March 1953.
85. Nowinski, W. W. & Niblo, G.: (through) Science News Letter 59:309, 1951.
86. Markham, J. D. & Hoff, E. C.: J. A. M. A. 152:1597, 1953.
87. Feldman, D. J. & Zucker, H. D.: J. A. M. A. 153:895, 1953.
88. McCormick, W. J.: Arch. Pediat. 70:114, 1953.
89. Wadhwani, T. K.: Indian Med. Gaz. 87:3, 1952.
90. Chute, W. D.: J. Missouri State Med. Assoc. 47:42, 1950.
91. Forssman, S. & Frykholm, K. O.: Acta Med. Scand. 128:256, 1947.
92. Jasinshi, B.; Schweig. Med. Wochuschr. 78:756, 1949.
93. Howard, L. R. C.: Chem. & Drug. 160:66, 1953.
94. Brown, E. A. & Ruskin, S. L.: Ann. Allergy 7:65, 1949.
95. Crescenzo, V. M. & Cayer, D.: Gastroenterol. 8:754, 1947.
96. Nasio, J.: Rev. Gastroenterol. 14:340, 1947.
97. Nash E. C.: Amer. Pract. 3:117, 1952.
98. Scheffler, W. A.: Am. J. Surg. 81:85, 1951.
99. Morris, G. E.: Postgrad. Med. 14:443, 1953.
100. Karnaky, K. J.: Surg., Gynec. & Obstet. 91:617, 1950.
101. Merkel, B. J.: Am. J. Obstet. & Gynec. 64:416, 1952.
102. Greenblatt, R. B.: Obstet. & Gynec. 2:530, 1953.
103. Javert, C. T.: (through) Food Field Reptr., March 22, 1954, p. 53.
104. Tash, H.: Zentralbl. f. Gynak. 73:999, 1951.
105. McCormick, W. J.: L'Union Med. du Canada, Aug. 1948.
106. Stern, R. L.: J. A. M. A. 145:175, 1951.
107. Parish, F. A.: Ann. Allergy 11:85, 1953.
108. Beinhauer, L. G.: Arch. Derm. & Syph. 69:188, 1954.
109. Klasson, D. H.: Arch. Derm. & Syph. 56:864, 1947.
110. Poser, E.: Illinois Med. J. 93-106, 1948.
111. Brody, H. D.: J. Am. Diet. Assoc. 29:588, 1953.
112. Anon.: Drug Trade News, Oct. 7, 1952.
113. De Wit, J. C.: Maandschr. v. kindergenusk. 17:367, 1950.
114. Rath, M. M.: Med. Times, Oct. 1951.
115. May, C. D. et al: Am. J. Dis. Child. 82:282, 1951.
116. Wallerstein, R. O., Harris, J. W. & Gabuzda, G. J., Jr.: Am. J. Med. 14:532, 1953.
117. Merskey, C.: Brit. Med. J. 2:1353, 1953.
118. Holly, R. G.: Proc. Soc. Exptl. Biol. & Med. 78:238, 1951.
119. Editorial: Lancet 2:923, 1953.
120. Bronte-Stewart, B.: Quart. J. Med. 22:309, 1953.
121. Proehl, E. C. & May, C. D.: Blood 7:671, 1952.
122. Albers, H.: Zeutralbl. f. Gynak. 73:995, 1951.
123. Willis, G. C.: Canadian M. A. J. 69:17, 1953.
124. Friedell, M. T., Drucker, E. F. & Pickett, W. J.: J. A. M. A. 138:1036, 1948.
125. Neivert, H., Engelberg, R. & Pirk, L. A.: Arch. Otolaryngol. 47:37, 1948.
126. Anon.: Manuf. Chem. 22:223, 1951.
127. Beidleman, B.: J. Clin. Nutrition 1:119, 1953.
128. Gale, E. T. & Thewlis, M. W.: Geriatrics 8:80, Feb. 1953.
129. Editorial: Brit. Med. J. 2:733, 1952.
130. Heroux, O. & Dugal, L. P.: Canadian J. Med. Sci. 29:164, 1951.
131. Schnir, M.: Rev. Argentina Reumatol. 15:232, 1951.
132. Williams, E. Y.: Med. Rec. 160:661, 1947.
133. Williams, E. Y. & Bullock, W.: Med. Times 75:189, 1947.
134. Editorial: J. A. M. A. 147:1184, 1951.
135. Weaver, W. L.: South Med. J. 41:479, 1948.
136. Craig, R. M. et al: Arch. Physical Med. 27:603, 1946.
137. Hollenbeck, C. M. & Monahan, R.: Proc. Fifth Research Conference, American Meat Institute, Chicago, March 26 & 27, 1953.
138. Kraybill, H. R. & Dugan, L. R., Jr.: Agri. & Food Chem. 2:81, 1954.
139. Anon.: Meat Mag., Jan. 1954.
140. Anon.: Science News Letter 62:312, 1952.

INCREASING THE DETAIL MAN'S PRODUCTIVITY

(Continued from page 793)

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• • •

At the present writing, it is difficult to tell whether the blame is with McCarthy for bulldozing the Army or the Army for appeasing McCarthy. Only one thing is certain at this time: Ike is having as much trouble with McCarthy as Truman had with MacArthur, and getting little more comfort from Stevens than he gets from Stevenson.

• • •

In confusing the issues of the hearings, there are those who oversimplify by saying there's nothing unusual about trying to get a Buddy a commission instead of K. P. Duty. Then, of course, there are those who say that a request backed up with the threat of a punch in the nose is hardly "in the best interests of the United States."

• • •

Standout of the hearings appears to be Special Counsel Ray Jenkins. His knowledge of procedure is the most forceful Tennessee legal offering since Clarence Darrow made a monkey out of William Jennings Bryan in the Scopes case.

• • •

All principals seemed to share a common lack of material; McCarthy kept rising to pointless points of order, Secretary Stevens left literal and figurative impressions on the witness chair and opposing counsel Cohn and Welch used the legal profession's established courtesies in trying to prove one another cockeyed liars.

• • •

The televised proceedings were a bone in the throat to broadcasting networks. They felt they were losing millions of dollars in cancelling the inanities of daily soap opera to offer what McCarthy called "a circus" as a public service without fee.

• • •

By the end of the first week, the radio and television audience had fewer neutrals than a barroom free-for-all. Somewhere between the implications of perjury, appeasement and old-fashioned skullduggery, the White House felt like a blight house.

• • •

The Cosmetic Industry stood aghast at the proceedings, in which one member of the Administration implied that another was a stinker. Taken on a family basis, many manufacturers protested the type of thing that can happen in one's own business organization. The resentment was not against the charges, just the accuracy.

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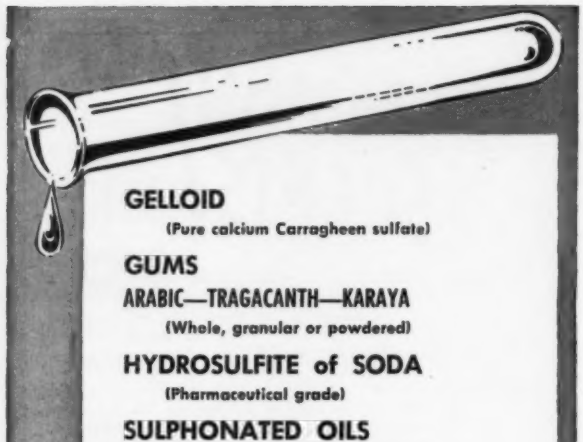

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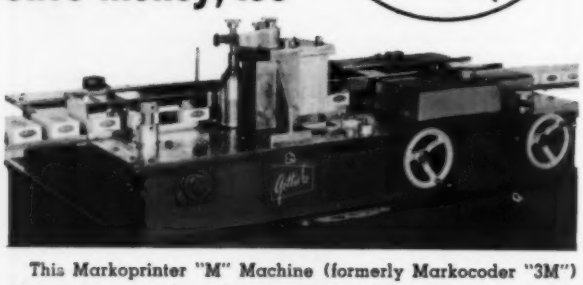

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The average physician is fed up with this so-called "chicanery" and feels that the manufacturers have made fortunes at the expense of his professional reputation. The doctors admit that these drugs are great contributions to medicine, but they resent the fact that these products were introduced with tremendous fanfare before the manufacturers really knew the full story of the pharmacological and clinical data of these products.

The pendulum is now swinging back to the old therapy with the new drugs being used only when they are specifically indicated. Since the advent of the sulfa drugs and the antibiotics there had been physicians under the impression that each new product introduced is a cure for a specific disease. However, now they know differently.

The detail man is the most important factor in pharmaceutical marketing and he is the most productive. But the average detail man's cost of calling on a physician is high. The questions that need answering, therefore, are:

1. How can the detail man increase his number of calls?
2. How can the detail man increase his number of calls on the busy physician?
3. How can the detail man increase his hospital and retail drug store calls?

Even though a salesman does a good job in stocking the drug store and the hospital, it is the prescriptions that count. The detail man must therefore *see the doctor first*. It is better to see an extra doctor a day than to call on three retail drug stores.

Some doctors are busy and some are slow. It is customary to list the doctors as to the number of prescriptions they write, classifying them as A, B, C, and D. The A doctors are the busiest. Detail men claim they can only see five doctors a day. On the average, a detail man should be able to see six or seven doctors a day which includes at least three A men, and three B or two B and two C men. Some days he can see many more and some days he can see less. The number of calls will vary with the territory, i.e., city or country, as well as with concentration of physicians in a given area.

How long should a detail man spend with a doctor? Much can be done in five minutes. Ten minutes on rare occasions. The best details are usually the fast ones. The long drawn out details are usually made with doctors who just want to pass the time of day and these usually turn out to be non-productive.

Frequency of call is of vital importance. Should it be on a 30, 60, or 90 day frequency? This depends on how many detail men are in the field for a particular company, how many items the company has in its

catalog, how much advertising the company does, and how long the doctor has been called on by the same man.

There are a number of doctors who write on the first detail call. These doctors will change to other items as often as they are seen by different detail men. Each visit to the doctor is an investment. The good man, and continuous prescriber of an item, must be called on a number of times.

A doctor writes your product because:

1. He likes the product.
2. He likes the company.
3. He likes the detail man.

If the doctor likes all three, you are in. However, the doctor is only human and may forget, so he must be called upon frequently to remind him of your product giving him additional advantages. You can detail the same item for years if you are willing to search for new sales angles and handle them intelligently.

Hospital displays are very valuable to meet those doctors whom you cannot see at their offices. Many of these doctors will take more time out to discuss your product at a display where they are not bothered by by their office routine. Very profitable contacts are made at these displays.

The salesman who thinks that he has saturated his territory and that business cannot be increased each year, should examine the following estimates of the population of this country:

1955	165 million
1960	175 "
1965	185 "
1970	195 "
1975	206 "

Very important things to bear in mind are:

1. The life expectancy of a specialty is diminishing.

2. A detail man must give the doctor $10 worth of information for $5 worth of the doctor's time.

3. By working as a team—management, advertising, and sales—putting their shoulders to the wheel—will produce increased volume and profits.

T.G.A. MEETING

(*Continued from page 788*)

whether the sales plans, as reported to the Commission, are in operation, what the effect thereof may be at the retail level, and whether current pricing practices and promotional allowances are in compliance with the rules. This field investigation is not limited to the 15 companies, but is designed to cover the industry as a whole.

"A number of major trading areas will be investigated," said Mr. Howrey, "in the East, in the Middle West, in the Far West, and in the South. In each area the investigators will examine several of the large department stores, two or more drug chains, a representative number of independent drug stores, a small number of

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the leading beauty shops, and a small number of cosmetic wholesalers or jobbers.

"The data to be secured will include manufacturers' pricing schedules, discounts, freight allowances, promotional allowances, promotional services or facilities furnished, cooperative advertising allowances, special deals, demonstrator services, and the like.

"From these facts the Commission should be able to ascertain whether the various manufacturers are adhering to the sales plans filed with the Commission, the extent, if any, of price discriminations, the availability of promotional allowances for demonstrators, push-money paid to sales girls, and shop and counter display space.

"When this spot investigation is completed the Commission will have the whole picture. I can then decide whether the trade practice rules have done the job or whether it must proceed on a wholesale case-by-case bases involving formal complaints. If the rules do not work you can rest assured, 'with all the hay that is down,' that the Commission will be compelled promptly to invoke its compulsory procedures. However, the fact that a few hard core violations may turn up, requiring formal complaints, will not be enough to discredit the rules as a whole. One of the purposes of trade practice rules is to ferret out and pinpoint the willful violator."

Hugo Mock, General Counsel of the T.G.A., spoke of double penalization of American manufacturers of toilet articles, first by the general policy of lowering tariffs in favor of European products, and secondly by raising the exemption for tariff baggage to $500. This limit is now threatened with a bill introduced into Congress to raise the amount to $1,000 which would be disastrous to many lines of perfumes and toilet articles, said Mr. Mock.

Mr. Mock commented on the cut in the excise tax, indicating that the effort for complete removal of the tax will be strongly pressed. On the matter of product liability, Mr. Mock said:

Manufacturers will be reminded on the wide publicity given to new ordinances regarding combustible liquids used, for instance, in hair preparations or in nail polishes, and such ordinances are becoming increasingly difficult to obey where they are not uniform in various states. With the advent of aerosols there is a new hazard in product liability and it behooves the careful manufacturer to get guarantees of safety from all suppliers of containers, whether they are glass or metal."

The Welch Packaging Awards were conferred the winners at luncheon on the first day of the meeting. The plaque for the best packaging of products retailing for more than $1.00 was given to Velo-Derma, Ltd., and was accepted by Richard Salomon. The plaque for products retailing for $1.00 or less was given to the Mennen Company and was accepted by William Mennen. The presentations were made by Joseph Keho, chairman of Charles S. Welch Award Committee, and president of Dorothy Gray.

At luncheon on the third day (the day of the papers of the Scientific Section) the CIBS Award of $250 for the best paper presented at the meetings of the Scientific Section during 1953, was conferred upon E. T. Hinkle Jr., Dr. F. C. Nachod, and Dr. M. L. Tainter, of the Sterling-Winthrop Research Institute, for the paper Methods of Determining Emollient in the Skin.

John A. Ewald, president of Avon Products, was elected president of the Association for the current year. Vice-presidents elected are: A. E. Johnson, Colgate-Palmolive Company (replacing H. J. Lehman, Wildroot Company, resigned); Jean Despres, Coty (re-elected); Pierre Harang, Houbigant Sales Corp.; and Charles T. Lipscomb Jr., Pepsodent Division Lever Brothers (re-elected). Philip C. Smith, Yardley of London, was re-elected treasurer, and William F. Denny Jr., Frances Denny, was re-elected secretary.

New directors elected for three year terms are: B. L. Emery, Chesebrough Mfg. Co.; William Hunnefield, Jean Nate; and Northam Warren Jr., Northam Warren Corp. Directors re-elected for three year term are: Edward J. Breck, John H. Breck; Oscar Kolin, Helena Rubinstein; and Wrisley B. Oleson, Allen B. Wrisley Co.

New directors representing the associate members are: Victor G. Fourman, Syntomatic Corporation; and Paul E. Roehrich, Richford Corporation.

Robert E. Schwartz, Wildroot Company, was elected to the board for two years to fill out the term of A. E. Johnson who became a vice-president.

PATENT THOUGHTS AND TRENDS

(Continued from page 815)

Recent Patents

2,676,134—Commercial Solvents Corp. & Therapeutic Composition of Neomycin and Bacitracin.
2,676,135—Univ. of Md.—Production of Modified Newcastle Disease Virus.
2,676,136—Collette-Week Corp. — Production of Solid Fat-Soluble Vitamin Pellets.
2,676,138—Sterling Drug—Stabilized Papain Composition.
2,676,139—Am. Home Products—Hyaluronidase.
2,676,173—Schenley—Penicillin Salts of Oxybenzyl-Isobutyl Amines.
2,676,174—Syntex (Mexico) — Cyclopentanophenanthrenes.
2,676,175—Sankyo Kabushiki Kaisha (Japan)—Thiamine Process.
2,676,176—Imperial Chemical Industries (England)—Pyrimidines Manufacture.
2,676,177—Hoffmann-La Roche—Prepn. of Optically Active 3-Methoxy-N-Methyl Morphinans.
2,676,178—Hoffmann-La Roche — Isonicotinaldehyde Thiosemicarbazone Process.
2,676,181—Upjohn—Oxidation of Steroids.
2,676,183—G. D. Searle — 4a - Methyl - 7 - Iso-

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Container guides hold any type, shape or size containers rigidly in filling position. Handles any liquid. Has automatic product supply and automatic filling control. Advanced features. Minimum floor space. Two-Head and Four-Head models. Write for Multi-U-Meter Bulletin.

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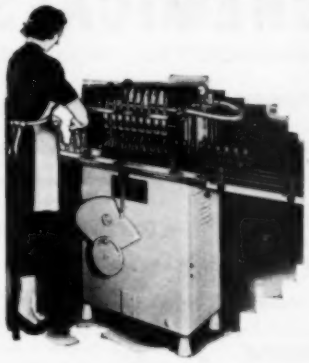

Model B-49 Straightline Vacuum Filler handles any liquids. Quick changeover for all container sizes (AGST to gallons). For operation with or without discharge conveyor. Simple hand lever operation for multiple filling of up to 9 containers at a time, otherwise completely automatic. Filling is uniform, clean and fast. Write for Bulletin B-49.

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Model B-2 Vacuum Filler handles any liquids; all containers ranging from AGST finishes to containers 4¾" dia. Four container holding cups enable continuous filling of two containers at a time. Product supply is automatic. Portable. Ideal standby for peak loads. Write for Bulletin B-2.

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Siphon Filler efficiently handles free-flowing liquids. For all container sizes including gallons. Stainless steel, no drip siphon tubes. Write for Siphon Bulletin.

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2,676,902—**Merck—Para-Aminosalicylic Acid Containing Compositions.**

2,676,903—**Hoffmann-La Roche—Fractional Liquid Extraction of Vitamins.**

2,676,904—**G. D. Searle — Introduction of 11 - Hydroxyl Substituents into Steroids.**

2,676,964—**Schering—3-Pyridyl Propylamine Antihistamines.**

2,676,966—**G. D. Searle—Quaternary Salts of 9-Carbazole - alkylamines and 10 - Acridan - alkylamines.**

2,676,967—**Hoffmann-La Roche—Pyridines.**

2,676,968—**G. D. Searle — Aralkylphenoxyacetamidines.**

2,676,970—**Hoffmann-La Roche—Benzothiazoles.**

2,676,971—**G. D. Searle—Quat. Ammonium Derivatives of Aminoalkylxanthenes.**

2,676,976—**Nat. Research Dev. Corp. (England)—Synthesis of Pantothenic Acid-4′ Phosphate.**

2,676,978—**Schenley — P - Alkoxy - Benzalacetophenone Thiosemicarbazones.**

2,677,640—**Am. Cyanamid—Solutions for Treatment of Enterohepatitis.**

2,677,641—**Am. Cyanamid—Tuberculostatic Agent.**

2,677,632,3—**Am. Cyanamid — Enzyme Purification.**

2,677,644—**Am. Cyanamid—Purification of Vitamin B_{12} Solutions.**

AEROSOLS IN GLASS

(Continued from page 801)

swelled up like a small balloon, owing to the internal pressure (which was 15 psig in this particular one) of the "Freon-114" gas. Tiny holes in the plastic allowed this gas to escape slowly and safely, and eventually the plastic returned to the original shape of the bottle The broken pieces of glass were crackling around inside the covering, but no glass escaped. Nor did the neck of the bottle break open, because the metal collar was sealed to the plastic covering.

Why not pay a little more for the bottle, the plastic-coated users ask, and make sure you have a container of complte safety. This is a point that cannot be disputed. The plain-bottle men admit that the coated bottle is safer when the two are compared side by side. In the one case there is a definite shattering of glass; in the other, there is absolutely no shattering of glass.

There are other advantages too. Freedom of design allows the bottle manufacturer to produce unusual shapes which, without the protective coating, might be structurally weak. These bottles are available in various colors (so are the plain-glass ones), ranging

from white to black, with intermediate variations. They may be just as transparent as glass, translucent, opaque, or frosted. Printing may be applied directly to the glass under the coating, or to the plastic itself.

When dropped, the plastic absorbs some of the shock and helps prevent the glass from becoming scratched or chipped.

There is a wider latitude of pressure available up to 30 pounds per square inch. Furthermore, the plastic-coated spokesmen declare, if a bottle has a pressure of 25 psig at 70°, or room temperature, there will be less change in the nature of the spray if the temperature drops to 65° than there would be in an uncoated bottle of, say, 15 psig. Conversely, if a bottle is subjected to an increase in temperature, as in the summertime, the pressure within the container will rise accordingly. The plastic-coated bottle is better equipped to meet these unexpected conditions.

In fairness to the uncoated bottle, it should be mentioned that representatives of the companies concerned have had these ultra-low pressure bottles in their own homes for quite some time and have observed them in use under all these conditions. They declare that there is a difference in the fineness of the spray at varying room temperatures, but not enough to discredit their bottle.

We have an uncoated bottle at home and noted, on a chilly morning, that it ejected a stream along with some spray.

Several manufacturers are preparing to package their products in the plastic-coated bottle because of the added safety it provides. At least one firm has switched from the plain-glass to the coated container for the same reason. Both types are now being sold over the counter in retail stores and have been well received.

This controversy between the two bottle types in part of the growth of the glass aerosol industry, and as time goes on, each bottle, coated and uncoated will undoubtedly be improved greatly, both structurally and aesthetically.

It is granted that one type is safer than the other, but so is a plastic cup safer than a drinking glass, and a can safer than a bottle. Both stand side by side in the home, and the user treats one more gently than the other.

Of course, the lady shopper will be the final judge as to whether the plain-glass and the plastic-coated bottles will share the market. She will become aware of their respective weaknesses and advantages and buy them to fit her needs. Only then will this controversy be settled once and for all.

BABY SPECIALTIES

(Continued from page 785)

Some of the higher alkyl fatty acid esters can be, and are being used, both as an emollient, and for their solvent action on lanolin. Vegetable oils, like peanut or olive oil are also used as emollients. Up to 30 per

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An Amerchol such as the multi-sterol, liquid Amerchol L-101 enhances softening, penetrating and spreading activity while holding desirable moisture to the skin. The surface active Amerchols function at the interface in oil-in-water emulsions to bring about these unique effects.

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cent of these vegetable oils can be used with a mineral oil base to provide the desired emolliency.

It must be remembered that vegetable oils are strongly prone to rancidity, and so, must be protected with an antioxidant. Many manufacturers use hydroquinone for this purpose. However, newer products contain propyl gallate, which is more effective and less irritating than hydroquinone.

Many manufacturers produce oils containing one or more germicidal ingredients. Their value and effectiveness are subject to debate. It is difficult to measure the effectiveness of these agents, especially on the tender skin of a baby. The antiseptics used in these products cover a wide range of compounds. Some are in themselves very irritating and must be chosen with due caution. The bis-phenols and quarternary ammonium compounds, it seems, have displaced many of the older germicidal agents. Hexachlorophene, for instance, has become a quite popular ingredient, although such compounds as hydroxyquinoline base, sulfate, and benzoate; chlorothymol and chlorobutanol are frequently encountered.

No. 4
BABY OIL

Mineral Oil U.S.P.	90.0 per cent
XXX Lanolin	3.0 " "
Ethyl Stearate	4.0 " "
Isopropyl Myristate	3.0 " "

Warm the mixture until the lanolin is completely dissolved. Mix well, and package.

No. 5
BABY OIL

Mineral Oil 65-75 Visc	79.0 per cent
Olive Oil	20.0 " "
Lanolin	1.0 " "
Antioxidant q.s.	

Follow the same procedure as indicated in formula No. 4 above.

No. 6
BABY OIL

Olive Oil	40.0 per cent
Sesame Oil	30.0 " "
Avocado Oil	20.0 " "
Isopropyl Palmitate	10.0 " "

Mix together and package.

No. 7
BABY OIL ANTISEPTIC

Mineral Oil	75.0 per cent
Isopropyl Palmitate	21.9 " "
Lanolin	3.0 " "
Hexachlorophene	0.1 " "

Warm the isopropyl palmitate and lanolin until complete solution is effected. Add the hexachlorophene and stir until it is dissolved. Pour this mixture into the mineral oil and agitate until the mixture is uniform.

No. 8

BABY OIL ANTISEPTIC

Olive Oil	40.0 per cent
Mineral Oil	59.9 " "
Oxquinoline Sulfate	0.1 " "

Mix until the powder is completely dissolved, and a uniform solution results.

No. 9

BABY OIL ANTISEPTIC

Olive Oil	33.0 per cent
Isopropyl Palmitate	11.0 " "
Chlorothymol	0.1 " "
Mineral Oil	55.9 " "

Follow the same procedure as indicated in formula No. 8.

Some of the major manufacturers have recently placed emulsified antiseptic baby lotions on the market. These are intended for use in place of oils. They are advertised to prevent seborrhea, or more commonly, cradle cap," and diaper rash, or "ammonia dermatitis." The former is usually caused by the lack of proper cleansing of the scalp, while the latter can usually be attributed to bacterial decomposition of the urine. These preparations are definitely of value as a preventative measure against these dermatological conditions. However, their therapeutic value is a matter for debate.

No. 10

BABY LOTION ANTISEPTIC

*Tegin	4.0 per cent
Glycerin	5.0 " "
Mineral Oil	2.0 " "
Water	88.8 " "
Hexachlorophene	0.2 " "

Place all ingredients in the same container and heat to a temperature of 95° to 100° C. with continuous agitation. Continue this agitation throughout the cooling and filling operations. Care should be taken so as not to incorporate air.

No. 11

ANTISEPTIC BABY LOTION

*Tegin	6.00 per cent
Lanolin	2.00 " "
Mineral Oil	2.00 " "
Sorbitol	2.00 " "
Cetyl Trimethyl Ammonium Bromide	0.16 " "
Water	87.84 " "

*Goldschmidt Chemical Corp., New York, N. Y.

Prepare in a manner similar to that of the foregoing formula, No. 10.

Solid creams are not in too much demand, as far as baby cosmetics are concerned. They are sometimes used during the early months of an infant's life, but

have you tried

MODULAN T.M

The MODIFIED LANOLIN with new properties.

Modulan is chemically treated lanolin containing all the constituents of lanolin modified by a unique treatment to impart NEW and VALUABLE PROPERTIES.

Modulan forms clear solutions even in cold mineral oil and deposits hydrophobic, emollient films on skin and hair. These desirable protective films are waxy rather than tacky and are very pleasant to the touch.

Modulan is extremely hydrophobic – does not form greasy emulsions and is practically odorless. CLINICAL INVESTIGATIONS HAVE INDICATED THAT IT IS HYPO-ALLERGENIC.

Because of its solubility in mineral oil and its outstanding compatibility with oil-in-water emulsions and with soaps and shampoos, Modulan is particularly recommended for use in creams, lotions, baby products, hair preparations, make-up, and ointments.

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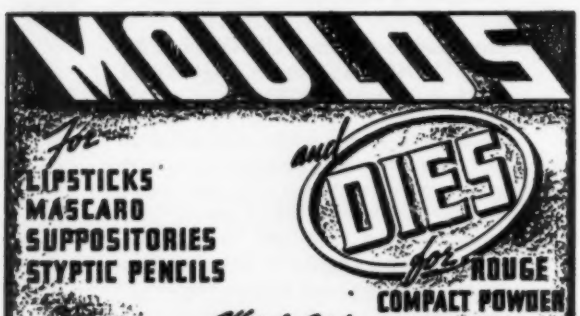

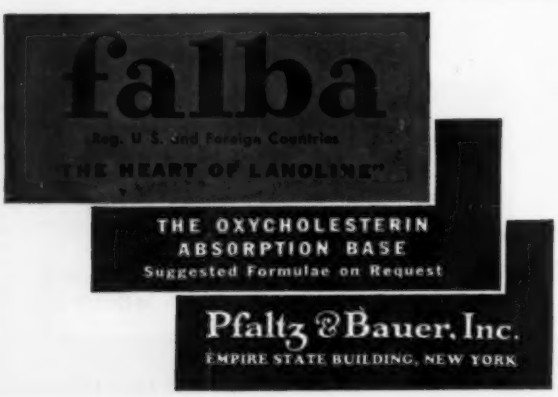

are more useful from the first through the third or fourth year. At this period, in the child's development, he or she suffers more often from drying and chapping of the skin, so that the use of a cream, high in emollient properties is indicated.

In some cases these creams are used for such skin conditions as diaper rash and prickly heat. They are very helpful in the alleviation of discomfort from diaper rash, but it has been found that powder, high in starch and boric acid content, is more effective against prickly heat.

No. 12
BABY CREAM

Mineral Oil	50.0 per cent
Isopropyl Palmitate	7.0 " "
Lanolin	20.0 " "
Cetyl Alcohol	3.0 " "
Beeswax	10.0 " "
Petrolatum	10.0 " "

Melt the whole and stir until well mixed. Pour into jars at 55° C.

This cream is very similar to the liquifying type cleansing creams, but it acts as a very excellent therapeutic agent, even in severe cases of ammonia dermatitis.

No. 13
BABY CREAM

Stearic Acid	4.0 per cent
Glyceryl Monostearate	12.0 " "
Lanolin	3.0 " "
Olive Oil	10.0 " "
Sorbitol	5.0 " "
Triethanolamine	1.0 " "
Water	65.0 " "

Place all ingredients in one container, and heat with stirring to 95° C. Agitate until the cream has cooled to 60° C. Pour at this temperature.

This cream has a pH value of 7.1, or nearly neutral, and will not cause any irritation whatsoever, upon application to even the tenderest of skins, unless, of course, the user is allergic to one or more of the ingredients. However, such an allergy is very rare, even in children.

Probably the most common ailment in the life of an infant is ammonia dermatitis, or diaper rash. Several preventative agents of exceptional value are now on the market. These depend, for their action, upon certain bactericidal ingredients, which kill or inhibit the bacterial flora, thus preventing the formation of ammonia. The actual diaper rash is irritation from the ammonia liberated, as a decomposition product, from urine, by the action of these bacteria.

If the diaper is changed immediately upon "wetting," diaper rash will not appear. But if the wet diaper is allowed to remain for a sufficient length of time, a definite reddening of the skin will be observed. Upon continued irritation, this reddening will gradually spread and deepen in color. Further irritation causes

open lacerations. The following formula represents one of the most effective therapeutic agents the author has thus far encountered. It is of very exceptional value, even in the advanced stages of ammonia dermatitis.

No. 14
DIAPER RASH OINTMENT

Petrolatum	29.5	per cent
*Lanolin, Hydrous	70.30	" "
Boric Acid	0.14	" "
Hexachlorophene	0.05	" "

*Anhydrous lanolin can be converted to hydrous, by the addition of 30 per cent water. That is, 30 parts water to 70 parts lanolin. Stir the mixture until a light yellow cream is obtained, and all water is absorbed.

Warm the fats until they are semi-fluid. Incorporate the powders and mix until they are evenly distributed. Mill or comminute the mixture, and package.

The antiseptic lotions, described earlier in this article, can be used as preventative measures. However, the germicidal diaper rinses seem to be of more use. These rinses consist of a water soluble germicide, usually a quarternary ammonium compound and a soluble inert ingredient, such as starch. The powders can be either compressed into tablets, packaged as a powder in glassine envelopes, or dissolved in water, and sold as a liquid. No matter which of these forms the product may take, liquid, powder, or tablet, they are all used in an identical manner.

The diapers are washed in the ordinary way, using either soap or detergent. They are rinsed thoroughly to remove all traces of organic matter. They are then immersed in a solution of the germicide, wrung out by hand, and allowed to dry, without re-rinsing.

The following formulae serve to illustrate all three types of products. All must be labeled as drugs, stating the active ingredient.

No. 15
DIAPER RINSE (POWDER)

*Hyamine 1622	18.0	per cent
Starch	11.5	" "
Milk Sugar	70.5	" "

*Rohm & Haas Company, Philadelphia.

Mix all of the powders very thoroughly. Package in small glassine envelopes, 10 grams per envelope.

Use Dilution: Dissolve the contents of one envelope in one gallon of warm water.

No. 16
DIAPER RINSE (TABLETS)

Part I	Hyamine 1622	18.0	per cent
	Starch	47.4	" "
	Milk Sugar	26.6	" "
	Sodium Bicarbonate	9.0	" "
Part II	Alcohol	6.0	" "
	Water	90.0	" "
	†Sea Kem Type II	4.0	" "

†Seaplant Chemical Corporation, New Bedford, Mass.

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Mix the powders thoroughly. Prepare a mucilage from Part II of the formula by wetting the gum with the alcohol. Heat the water to about 90° C. and pour it into the moistened gum. Stir until complete solution is effected.

Pour enough of the gum solution into the powders to make a gummy mass. When this mass is almost dry, granulate it by forcing it through a ¼" mesh screen. Compress into one gram tablets.

Dilution Directions: Dissolve one tablet in one gallon of warm water. Use as directed.

No. 17
DIAPER RINSE (LIQUID)

*Cetab	16.8 per cent
Water	73.2 " "
**Triton X 100	10.0 " "

*Rhodes Chemical Co., Plainfield, N. J.
**Rohm & Haas Company, Philadelphia.

Dissolve the Cetab in the water, with a little heat, if necessary. Add the Triton and stir until the solution is homogeneous.

Dilution Directions: One teaspoonful (about 8 cc.) of the antiseptic per gallon of warm water. Proceed as directed.

PROBLEMS OF PHARMACY

(*Continued from page 793*)

he is going to make a profit and stay in business.

Under the present interpretation of the Federal Food, Drug, and Cosmetic Act as amended by the Durham-Humphrey Act, one can no longer obtain a copy of a prescription, once it has been filled, and take it to another drug store in hope of obtaining a lower price. For the only prescriptions that can be legally refilled are those whih call for products which normally can be sold over-the-counter without any prescription at all.

The court interpretations of the fair trade acts of the various states as they apply to prescriptions will tell the story as to whether or not this is to remain a problem peculiar to the pharmaceutical manufacturers. If the problem remains with the industry for the reason that the courts declare that these laws are not sufficient to control the situation, then the pharmaceutical manufacturers are going to have a real headache on their hands. And when one considers the complexity of marketing pharmaceuticals through detail men, direct mail and medical journal advertising, and other factors, one must extend his sympathy to these manufacturers if price cutting breaks loose on the prescription front.

Large price cutting stores are well known for their prescription departments. One can easily visualize these stores using their prescription departments as the bait to draw the customers into their stores. Such a

situation would indeed be a sorry one for this industry and for the retail pharmacist.

PROPRIETARY ASSOCIATION MEETING

(*Continued from page 796*)

"From a commercial point of view America, and American industry, has a sizable stake in international health. This is clearly indicated in some of the expenditures of the United States Government and by intergovernmental health agencies during the past few years. From April, 1948, through December, 1953, the Foreign Operations Administration and its predecessors, the Economic Cooperation Administration and the Mutual Security Agency, spent over $63,000,000 on pharmaceuticals for use in Europe and the Far East. In the year ending June 30, 1953, for use in South Asia (in the countries of Burma, Formosa, Indo-China, the Philippines and Thailand), they spent more than $1,725,000 on medicinals, pharmaceuticals and biologicals. During the same year the Technical Cooperation Administration spent $1,304,000 for pharmaceuticals, including biologicals, for use in Near Eastern and African countries. During the three years 1951-53 the World Health Organization and the Pan American Sanitary Organization spent $7,163,000 in the United States for products of the American pharmaceutical industry and the United Nations International Children's Emergency Fund, popularly known as UNICEF, spent $8,250,000 in this country for the same purpose. And we must remember that these purchases were only those made by governmental and intergovernmental agencies, that the demands of the world market can only increase as the economic conditions of much of the world's population are improved, and purchasing power, which can be used to obtain the tools to achieve better health, comes into being."

McDONOUGH HAIR-WAVING PATENT INVALIDATED

(*Continued from page 781*)

Inoperativeness, Indefiniteness, New Matter

It is interesting to note that the Master's conclusions on these points were attacked in part by both parties. The Master had found as a fact that three of the 37 mercaptans within McDonough's claims could not be used as waving agents. While recognizing the general rule that generic claims are invalid where so broadly drawn as to include compositions which do not produce the stated result, the Master was careful not to decide whether the inoperativeness of two or three of 37 compounds was ground for invalidating the claims. The Master preferred to base his holding of invalidity on other grounds. Judge Kaufman explicitly states his approval and notes that a review of the cases indicates that claims have been held invalid only where a substantial number of the elements they include are inoperative. While this particular holding is of little comfort to Sales Affiliates, it is nevertheless refreshing

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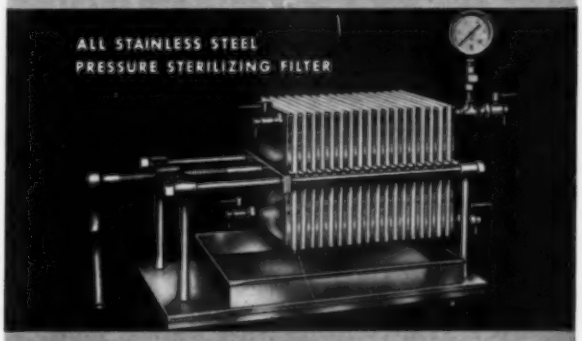

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to note that a Federal judge who has carefully considered the point has not seen fit to strike down a broad claim simply because a few of the compounds encompassed thereby do not give the desired results.

Along these general lines it is also of interest to note that the Judge held that the claims are not invalid as being inoperative because of the odor or possible toxicity of some of the mercaptans. The Judge said that total elimination of odor is not required to support operativeness. As to toxicity, the Judge stated that Helene Curtis and Gillette had shown that only some of the mercaptans might be toxic when administered in certain ways.

The Judge held that the claims were indefinite and cited the fact that McDonough and his own expert could not agree on the meaning of many of the limits stated in the claims.

Regarding new matter amendments, that is, those amendments to the claims changing the ranges, the Judge held that narrowing the range of concentration and pH did not involve the addition of new matter, as they were not contrary to the original disclosure.

Infringement

The Judge upheld the Examiner in finding infringement as regards some of the accused products. The winners objected to the Master's finding on the ground that the indefiniteness, vagueness and contradiction of the patent claims make any finding of infringement invalid. Sales Affiliates on the other hand urged that a proper interpretation of the claims show that all of the accused products infringe. The Judge neatly stated that the finding on infringement is proper, in the event that the other conclusions are overturned and the patent is declared valid by an upper court. As far as the interpretation of the claims so as to render all of the accused products infringements, the Judge did not agree with Sales Affiliates.

Sales Affiliates' Counter-Claim Against Helene Curtis

Sales Affiliates had alleged improper interference by Helene Curtis with the prosecution of McDonough's application for patent. Essentially, the alleged wrongful acts were the filing of a formal protest with the Patent Office against the issuance of the McDonough patent; making oral statements to the Examiner for the purpose of inducing him to disallow McDonough's application; and furnishing erroneous information to the Patent Office as to the pH of a prior art reference and the purtify of commercial thioglycolic acid.

The Judge reviewed the evidence and rejected the counterclaim.

Patent Misuse and Unclean Hands

Sales Affiliates was charged with patent misuse and unclean hands," in concealing and suppressing the authorship and inconsistent results of certain tests made by its expert; in deleting certain matter from a

laboratory record submitted to the Patent Office; and in deliberately misrepresenting the pH and acid concentration of one of the prior art references to the Patent Office.

The Judge rejected the charges of patent misuse and "unclean hands" and pointed out that there have been thousands and thousands of pages of testimony and exhibits in the various proceedings in which the McDonough patent and application have been involved, and the instances complained of were merely isolated incidents.

Attorney's Fees

Helene Curtis and the other plaintiffs, which included Gillette, had asked the court to award them reasonable attorneys' fees. Judge Kaufman noted that while the litigation provoked by Sales Affiliates has been extensive, it was free of "unclean hands" and, furthermore, Sales Affiliates had obtained its patent only after years of determination and zeal in the belief that it had an invention worthy of patent. Consequently, the Judge held Sales Affiliates is not guilty of any bad faith or unfairness as to warrant an award of attorneys' fees.

Effect of Decision

Strictly speaking, Judge Kaufman's decision is legally effective only in the southern district of New York. Consequently, suits under the McDonough patent can be brought in other Federal districts and in this connection, it is noted that Sales Affiliates has in fact instituted suit in Kansas City under this patent against another party.

However, it cannot be overlooked that Judge Kaufman's decision was based on a tremendous record and may well set the pattern for the nation as a whole.

AEROSOL HAIR LACQUERS

(Continued from page 782)

metic manufacturer. This will not happen in a hurry but certainly there would be a large market for additional propellants which could better resist hydrolysis by water and having more varied boiling point characteristics than the dichlortetrafluorethane.

A word of caution at this point seems to be indicated. In formulating products of this type it is best to remember that the most acceptable mixture is a single base solution in which all the components are mutually soluble. Mixtures of several different solvents however are sometimes erratic in their behavior and though any single component may be soluble in one or the other a careful check should be made to assure complete solubility in the final mixture. A single insoluble speck could easily cause the valve to be clogged rendering the product worthless. In addition a laboratory check at 120° F. for an extended period of time should also be made to assure complete immunity of the container against any corrosion which may be possible.

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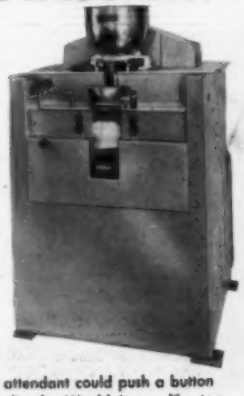

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Fairmount Chemical Co., Inc. 895
Felton Chemical Co., Inc. ..... Insert facing 764
Firmenich Incorporated ..... Cover 4
Florasynth Labs., Inc. 867
Fluid Chemical Co., Inc. 871

French, Inc., Benj. 854
Fritzsche Brothers, Inc. ..... Insert bet. 856-857

Givaudan-Delawanna, Inc. ..... Insert bet. 760-761 and pg. 850
Glycerine Producers Assn. 759
Goldschmidt Chem. Corp. ..... Insert facing 760
Gottscho, Inc., Adolph 880
Gross, A. & Co. 752

Haring Equipment Corp. 882
Haskins, R. G., Company 869
Heyden Chemical Corp. ..... Insert facing 828
Hoffmann-La Roche, Inc. 864
Hormann & Co., F. R. 891
Horn, John 895
Huisking & Co., Inc., Chas. L. 884

Imco Container Corp. ..... Insert facing 805

Jefferson Chemical Co. 859

Kelton Cosmetics Co. 879
Kohnstamm & Co., H. ..... Insert facing 765
Kolmar Laboratories 766

Leonhard Wax Co., Theodore 895

Magnus, Mabee & Reynard, Inc. 833
Mallinckrodt Chemical Wks. ..... Insert facing 781
Maschmeijer, A., Jr., Inc. 885
Merck & Co., Inc. 776
Metalsmith Division of Orange Roller Bearing Co. 878

National Association of Private Brand Manufacturers 824
Neumann, Buslee & Wolfe, Inc. 891
New Jersey Zinc Co. 872
New York Quinine & Chemical Works, Inc. 770
Niagara Blower Company 874
Norda Essential Oil & Chemical Co. ..... Cover 2
Nysco Laboratories 895

Old Empire Mfg. Chemists, Inc. 889
Orbis Products Corp. 855
Owens-Illinois Glass Co. ..... 802 and 817

Parsons-Plymouth, Inc., M. W. 862
Peerless Tube Company ..... Insert facing 804
Penick & Co., S. B. 756
Pennsylvania Glass Products Co., Inc. 844
Pennsylvania Refining Co. 876
Perl Machine Mfg. Co. 877
Pfaltz & Bauer Co., Inc. 888
Pfizer & Co., Inc., Chas. 846

Pittsburgh Lectrodryer Corp. 845
Plastic Assembled Products Co. 842
Plax Corporation 819
Polak's Frutal Works 847
Polak & Schwarz, Inc. 778
Popper & Sons, Inc. 870
Progressive Labelling Machine, Inc. 895

Reheis Co., Inc. 881
Rhodia, Inc. 762
Richford Corporation 816
Richlyn Laboratories 760
Risdon Mfg. Co., The 798
Rosenthal-Bercow Co., Inc. 889
Roure-Dupont, Inc. 761

Santonin Company of America, Inc. 884
Savoy Drug & Chemical Company 888
Schimmel & Co., Inc. 753
Seaplant Chemical Corp. 873
Sheffield Tube Corp. ..... Insert facing 821
Sindar Corporation 822
Standard Oil Company 751
Standard Pharmacal Company 892
Stepan Chemical Company 763
Sterwin Chemical, Inc. 895
Stokes Machine Co., F. J. 834
Stokes & Smith Company 838
Strong Cobb & Co., Inc. ..... Insert facing 756
Sunkist Growers ..... Insert facing 829
Sun Tube Corp. 806
Swift & Co. 767
Synfleur Scientific Labs., Inc. 774
Syntomatic Corp. 765

Tamms Industries, Inc. 895
Thurston & Braidich 892
Tombarel Products Corp. 757

Ungerer & Co., Inc. ..... Cover 3
U. S. Automatic Box Machinery Co. 836
U. S. Bottlers Machinery Co. 883
U. S. Industrial Chemicals, Inc., Insert bet. 768-769

van-Ameringen-Haebler, Inc. ..... Insert bet. 756-757
Van Dyk & Company, Inc. ..... Insert bet. 752-753
Verley & Company, Albert ..... Insert bet. 848-849
Verona Chemical Company 769

Welch, Holme & Clarke, Inc. 875
Westbrook Lanolin Company 854
Wheaton Co., T. C. ..... Insert facing 820
Will & Baumer Candle Co. 884
Windsor Chemical Laboratories 882
Witco Chemical Co. 896
Wolf, Jacques & Co. 880